UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF

SEP 26 2002

URGENT LEGAL MATTER --
PROMPT REPLY NECESSARY
CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Re: Special Notice Letter for South Dayton Dump, 1976 Dryden Road (aka) Springboro Pike, Moraine, Ohio

Dear Sir or Madam:

This letter follows a general notice letter that was issued on March 29, 2002, or, in some cases, more recently, in connection with the above-referenced Site. Since you are the listed contact person for the Potentially Responsible Party (PRP) identified above, this letter has been sent to your attention.

This letter serves three basic functions. First, it contains a formal demand for reimbursement of costs that have been incurred at this Site by the United States Environmental Protection Agency (U.S. EPA), in response to the health and environmental concerns at the Site. Second, this letter notifies you that a 60-day period of formal negotiations with the U.S. EPA automatically begins with this letter. Third, this letter provides general and site-specific information to assist you in these negotiations.

NOTICE OF POTENTIAL LIABILITY

As indicated in the general notice letter previously sent regarding this Site, U.S. EPA has information indicating that you may be a PRP as defined at Section 107(a) of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. 9607(a), as amended (CERCLA), with respect to this Site.

SPECIAL NOTICE AND NEGOTIATION MORATORIUM

U.S. EPA has determined that use of the Section 122(e) special notice procedures specified in CERCLA may facilitate a settlement between U.S. EPA and PRPs for this Site. Therefore, under CERCLA Section 122, this letter triggers a 60-day moratorium on certain U.S. EPA response activities at the Site. During this 60-day period, the PRPs, including you, are invited to participate in formal negotiations with U.S. EPA. You are also encouraged to voluntarily negotiate a settlement providing for the PRPs, including yourself, to conduct or finance the response activities required at the Site. The 60-day negotiation period ends on November 26, 2002. The 60-day negotiation moratorium will be extended for an additional 30 days if PRPs provide U.S. EPA with a good faith offer, including a revised draft administrative order on consent, to conduct or finance the Remedial Investigation/Feasibility Study (RI/FS),on or before November 26, 2002. Should this occur, negotiations will conclude on December 26, 2002. If settlement is reached between U.S. EPA and the PRPs, the settlement will be embodied in a consent order for RI/FS.

FUTURE RESPONSE ACTIONS

U.S. EPA plans to conduct a Remedial Investigation/Feasibility Study (RI/FS) at the site beginning on or about January 6, 2002.

WORK PLAN AND DRAFT CONSENT ORDER/DECREE

A copy of U.S. EPA's statement of work and draft administrative order on consent are attached. This is provided to assist you and other PRPs in developing a good faith offer for conducting the RI/FS. A good faith offer should include any proposed revisions you wish to suggest for the consent order and statement of work.

GOOD FAITH OFFER

As indicated, the 60-day negotiation moratorium triggered by this letter may be extended for 30 days if the PRPs submit a good faith offer to U.S. EPA. An offer to conduct or finance the

RI/FS must include a written proposal that demonstrates the PRPs' qualifications and willingness to conduct or finance the RI/FS and must include the following elements:

1. A statement of willingness by the PRPs to conduct or finance the RI/FS which is consistent with U.S. EPA's statement of work and draft administrative order and provides a sufficient basis for further negotiations.

2. A paragraph-by-paragraph response to U.S. EPA's statement of work and draft administrative order including a response to any other attached documents.

3. A detailed description of the work plan identifying how the PRPs plan to proceed with the work.

4. A demonstration of the PRPs' technical capability to carry out the RI/FS including the identification of the firm(s) that may actually conduct the work or a description of the process they will use to select the firm(s).

5. A demonstration of the PRPs' capability to finance the RI/FS.

6. A statement of willingness by the PRPs to reimburse U.S. EPA for costs incurred in overseeing the PRPs' conduct of the RI/FS.

7. The name, address, and phone number of the party or steering committee who will represent the PRPs in negotiations.

INFORMATION RELEASE

The parties are hereby notified that additional information has been obtained since the previous notice. U.S. EPA is providing the following information as an enclosure with this letter:

1. An updated list of names and addresses of PRPs to whom this notification is being sent. Inclusion on, or exclusion from, the list does not constitute a final determination by U.S. EPA concerning the liability of any party for the release or threat of release of hazardous substances at the Site.

2. A brief summary of the Site.

ADMINISTRATIVE RECORD

Pursuant to CERCLA Section 113(k), U.S. EPA must establish an administrative record that contains documents that form the basis of U.S. EPA's decision on the selection of a response action for a site. The administrative record files, which contain the documents related to the response action selected for this Site, will be available to the public for inspection and comment at:

The Superfund Records Center
U.S. EPA Region 5
77 W. Jackson Blvd.
Chicago, Illinois.

Copies of documents in the administrative record file are also available for public inspection pursuant to 40 CFR 300.805 at the local Site Repository located at:

Montgomery County Library
Kettering - Moraine Branch
3496 - Far Hills Avenue
Kettering, Ohio 45429
(937) 227-9509

PRP RESPONSE AND U.S. EPA CONTACT PERSON

You are enccuraged to contact U.S. EPA by October 7, 2002, to indicate your willingness to participate in future negotiations at this Site. Otherwise, you have 60 calendar days from this notice to provide U.S. EPA with a good faith offer, in writing, demonstrating your willingness to perform the RI/FS. You may respond individually or through a steering committee if such a committee has been formed. If U.S. EPA does not receive a timely response, U.S. EPA will assume that you do not wish to negotiate a resolution of your liabilities in connection with the response, and that you have declined any involvement in performing the response activities. You may be held liable by U.S. EPA under Section 107 of CERCLA for the cost of the response activities U.S. EPA performs at the Site and for any damages to natural resources.

Your response to this notice letter should be sent to:

Deena Sheppard-Johnson
Enforcement Specialist
U.S. Environmental Protection Agency
Remedial Enforcement Support Section
77 West Jackson Boulevard (SR-6J)
Chicago, Illinois 60604-3590

DEMAND FOR PAYMENT

With this letter, U.S. EPA demands that you reimburse U.S. EPA for its costs incurred to date, and encourages you to voluntarily negotiate a consent order under which you and other PRPs agree to perform the RI/FS.

In accordance with CERCLA, U.S. EPA already has undertaken certain actions and incurred certain costs in response to conditions at the Site. These response actions include several investigations including but not limited to a Screening Site Inspection, a Focused Site Inspection Prioritization Site Evaluation, and a Site Team Evaluation Prioritization. The cost of the response actions performed at the Site through U.S. EPA funding was approximately **$32,432.74** as of May 31, 2002 (see enclosed Itemized Cost Summary). In accordance with Section 107(a) of CERCLA, demand is hereby made for payment of the above amount plus any and all interest recoverable under Section 107 or under any other provisions of law.

As indicated above U.S. EPA anticipates expending additional funds for the RI/FS. Whether U.S. EPA funds the entire RI/FS, or simply incurs costs by overseeing the parties conducting these response activities, you are potentially liable for these expenditures plus interest.

ABILITY TO PAY - FUTURE FINANCIAL REVIEW

If your company wishes to settle, but would face a severe financial hardship by remitting the full payment amount, you may request that the U.S. EPA review your financial ability to pay. Under U.S. EPA policy, it is possible in appropriate circumstances for the payment to be made in installments. This may be considered as part of U.S. EPA's financial review. To process a claim of financial hardship, the U.S. EPA will require you to substantiate that claim by submitting detailed financial documentation. A complete description of the U.S. EPA's financial review process is available upon request.

PRP STEERING COMMITTEE

U.S. EPA recommends that all PRPs meet to select a steering committee responsible for representing the group's interests. Establishing a manageable group is critical for successful negotiations with U.S. EPA. U.S. EPA encourages each PRP to select one person from its company or organization who will represent its interests.

The factual and legal discussions contained in this letter are intended solely for notification and information purposes. They are not intended to be and cannot be relied upon as final U.S. EPA positions on any matter set forth herein.

If you have questions of a technical nature, please contact Karen Cibulskis at(312) 886-1843. For legal questions contact Thomas Nash, Associate Regional Counsel, at (312) 886-0552. Address all other questions to Deena Sheppard-Johnson, Enforcement Specialist, at (312) 886-7048.

Sincerely,

Wendy L. Carney, Chief
Remedial Response Branch #1

Enclosures:
1. Draft Consent Order
2. Statement of Work
3. Site Summary
4. SBREFA Fact Sheet
5. Updated PRP List
6. Itemized Cost Summary

cc: Robin Burr, Federal Natural Resources Trustee
U.S. Department of Interior
Office of Environmental Policy and Compliance
Custom House, Room 244
200 Chestnut Street
Philadelphia, PA 19106

Brian Tucker
Risk Assessment/Toxicology
Ohio EPA
DERR-Remedial Program
P.O. Box 1049
Columbus, OH 43216-1049

bcc: Thomas C. Nash, C-14J
Deena Sheppard, SR-6J
Karen Cibulskis, SR-6J
Matt Justice, Ohio EPA

Enclosure 1

South Dayton Dump Site

Administrative Order By
Consent Pursuant To
Section 104, 107 and 122
Of CERCLA

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5

SOUTH DAYTON DUMP SITE
MORAINE, OHIO

ADMINISTRATIVE ORDER BY
CONSENT PURSUANT TO
SECTIONS 104, 107 AND 122 OF CERCLA

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:	)	Docket No.
	)	
SOUTH DAYTON DUMP SITE	)	ADMINISTRATIVE ORDER BY
	)	CONSENT PURSUANT TO
MORAINE, OHIO	)	SECTIONS 104, 107 & 122 OF THE
	)	COMPREHENSIVE ENVIRONMENTAL
Respondents:	)	RESPONSE, COMPENSATION, AND
	)	LIABILITY ACT, as amended,
Listed in Attachment A	)	42 U.S.C. §§ 9604, 9607 and
	)	9622

I. JURISDICTION AND GENERAL PROVISIONS

This Administrative Order by Consent (the "Order") is entered voluntarily by the United States Environmental Protection Agency ("U.S. EPA") and the Respondents. The Order is issued pursuant to the authority vested in the President of the United States by Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. §§ 9604, 9607 and 9622. This authority has been delegated to the Administrator of the U.S. EPA by Executive Order No. 12580, January 23, 1987, 52 Federal Register 2923, and further delegated to the Regional Administrators by U.S. EPA Delegation Nos. 14-14-A, 14-14-C and 14-14-D, and to the Director, Superfund Division, Region 5, by Regional Delegation Nos. 14-14-A, 14-14-C and 14-14-D.

This Order requires the Respondents to conduct a Remedial Investigation and Feasibility Study ("RI/FS") to investigate the nature and extent of contamination at the South Dayton Dump Site in Moraine, Ohio (the "Site"), which is generally depicted in figure A, and develop and evaluate potential remedial alternatives. The RI/FS shall evaluate response actions consistent with 40 CFR Part 300.430, to address the environmental concerns in connection with the areas of contamination located within and surrounding the Site. Remedial action(s) selected through the RI/FS process will be implemented pursuant to a Record of Decision to be issued by U.S. EPA.

A copy of this Order will also be provided to the State of Illinois, which has been notified of the issuance of this Order. The U.S. EPA has also notified the Federal Natural Resource trustees of the negotiations in this action pursuant to the requirements of Section 122(j) of CERCLA.

The Respondents to this Consent Order agree to undertake all actions required by the terms and conditions hereunder, and consent to and will not contest or legally challenge the issuance of this Consent Order or the U.S. EPA's jurisdiction regarding this Consent Order. Respondents' participation in this Order shall not constitute an admission of liability or of U.S. EPA's Findings of Fact or Conclusions of Law and Determinations contained in this Order except in a proceeding to enforce the terms of this Order. Respondents agree to comply with and be bound by the terms of this Order. Respondents further agree that in a proceeding to enforce the terms of this Order, they will not contest the basis or validity of this Order or its terms.

II. PARTIES BOUND

This Order applies to and is binding upon U.S. EPA and upon Respondents and Respondents' heirs, receivers, trustees, successors and assigns. Any change in ownership or corporate status of Respondents including, but not limited to, any transfer of assets or real or personal property shall not alter such Respondents' responsibilities under this Order. Respondents are jointly and severally liable for carrying out all activities required by this Order. Compliance or noncompliance by one or more Respondents with any provision of this Order shall not excuse or justify noncompliance by any other Respondent.

Respondents shall ensure that their contractors, subcontractors, and representatives receive a copy of this Order, and comply with this Order. Respondents shall be responsible for any noncompliance with this Order. Respondents shall file a copy of this Order with the local Recorder of Deeds.

III. STATEMENT OF PURPOSE

In entering into this Order, the objectives of U.S. EPA and the Respondents are: (a) to determine the nature and extent of contamination and any threat to the public health, welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants or contaminants at or from the Site by conducting a remedial investigation; (b) to determine and evaluate alternatives for remedial action to prevent, mitigate or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site or facility, by conducting a feasibility study; and (c) to provide for the recovery of response and oversight costs incurred by U.S. EPA with respect to this Order.

IV. FINDINGS OF FACT

Based on available information, including the Administrative Record in this matter, U.S. EPA hereby finds, and, for purposes of enforceability of this Order only, the Respondents stipulate, that the factual statutory prerequisites under CERCLA necessary for issuance of this Order have been met. U.S. EPA's findings and this stipulation include the following:

1. The Site is located on Dryden Road (sometimes called Springboro Pike) in Moraine, Ohio. Approximately 25,060 people live within a 4-mile radius of the Site. The nearest residential properties are in a trailer park situated approximately .25 mile southeast of the Site.

2. Margaret C. Grillot and Kathryn A. Boesch are the current owners of the Site. A 49.87 acre portion of the Site (parcel A) was purchased by Horace Boesch in 1937. In 1945 Horace Boesch purchased an additional 30 acre portion of the Site (Parcel B). In 1947, Horace and Roxie Boesch conveyed an undivided ½ interest in Parcel B to Cyril Grillot. In 1951, Horace and Roxie Boesch conveyed an undivided ½ interest in Parcel A to Cyril Grillot.

3. From 1947 until the present, the Site has been owned by various members of the Boesch and Grillot families. In 1958, Horace and Roxie Boesch and Cyril J. and Ruby Grillot recorded a conveyance of a property interest (Right of Way Grant) to Dayton Power and Light. In 1975, Horace and Kathryn A. Boesch and Cyril J. and Ruby Grillot recorded a conveyance of a property interest (easement) to the University of Dayton. After Horace Boesch died in 1979, his estate conveyed shares of his interest in the Site property to members of his family. Some of these heirs conveyed their interest or a portion thereof to Katharine Boesch.

4. The Site began disposal operations in 1941. Materials dumped at the Site included drummed wastes. Hazardous wastes were accepted at the Site between June 1973 and July 1976. Drums containing hazardous waste from nearby facilities were transported to the Site. Some of the drums contained cleaning solvents (1,1,1-trichloroethane [TCA]; methyl ethyl ketone [MEK]; and xylene); cutting oils; paint; Stoddard solvents; and machine-tool, water-based coolants. In addition, a CERCLA Notification of Hazardous Waste Site Form submitted by Industrial Waste Disposal Company, Inc. in 1981 indicated that the Site had been used as a disposal facility for the industrial and municipal wastes of IWD's customers.

The notification did not include information about the specific types of wastes. More recently, the Site operated under a solid waste disposal permit issued by MCHD. The permit allowed disposal of solid, inert, insoluble materials such as unregulated foundry sand, slag, glass, and demolition debris. There is no liner at the Site.

5. In 1985, OEPA conducted a Preliminary Assessment (PA) at the Site. Based on this PA's findings, a U.S. EPA Field Investigation Team (FIT) conducted a Supplemental Site Investigation (SSI) at the Site. In 1991, the FIT collected 11 soil samples at or near the Site. Contaminants have been detected in on-Site soil samples at levels above background. Additionally, hazardous substances were reportedly disposed of at the Site in the past.

6. Soil sample results during the 1991 EPA FIT sample detected hazardous substances in on-Site soil samples at levels significantly above background. The following substances were detected: 1,2-Dichloroethene at 200 micrograms per kilogram in soil sample s8, tetrachloroethene at 11 micrograms per kilogram in soil sample s8, toluene at 7 micrograms per kilogram in soil sample s5, polychlorinated biphenyls, including Aroclor 1248 and Aroclor 1260, at 4,200 and 2,800 micrograms per kilogram, respectively, in soil sample s2, antimony at 31.6 milligrams per kilogram in soil sample s3, arsenic at 69.3 milligrams per kilogram in soil sample s9, barium as high as 991 milligrams per kilogram in soil sample s1, cadmium as high as 14 milligrams per kilogram in soil sample s3, chromium at 91.7 milligrams per kilogram in soil sample s3, mercury as high as .31 milligrams per kilogram in soil sample s3, nickel as high as 402 milligrams per kilogram in soil sample s8, lead as high as 3,300 milligrams per kilogram in soil sample s3, and zinc as high as 2,350 milligrams per kilogram in soil sample s3. Also, several polynuclear aromatic hydrocarbons were detected in several soil samples. Phenanthrene, benzo[a]anthracene, and benzo[a]pyrene were detected at concentrations as high as 16,000, 8,500, and 5,700 micrograms per kilogram, respectively, in soil sample s3; and fluoranthene was detected at 21,000 micrograms per kilogram in soil sample s6.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

Based on the Findings of Fact set forth above, and the Administrative Record in this matter, U.S. EPA has determined that:

1. The South Dayton Dump Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

2. TCA, MEK, toluene, xylene, 1,2 Dichloroethene, polychlorinated biphenyls, polynuclear aromatic hydrocarbons, arsenic, barium, cadmium, chromium, lead, nickel and zinc are "hazardous substances" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

3. Each Respondent is a "person" as defined by Section 101(21)of CERCLA, 42 U.S.C. § 9601(21).

4. Each Respondent is a person who either at the time of disposal of any hazardous substances owned or operated the Site, or arranged for disposal or transport for disposal of hazardous substances at the Site. Each Respondent therefore may be liable under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

5. The presence of hazardous substances at the Site or the past, present or potential migration of hazardous substances currently located at or emanating from the Site, or the placement of hazardous substances from the Site onto off-site areas constitute actual and/or threatened "releases" of hazardous substances from the facility into the "environment" as defined by Sections 101(8) and (22) of CERCLA, 42 U.S.C. §§ 9601(8) and (22).

6. The actions required by this Order are necessary to protect the public health, welfare, or the environment, and are not inconsistent with the NCP and CERCLA.

VI. ORDER

Based upon the foregoing Findings of Fact, Conclusions of Law and Determinations, and the Administrative Record for this Site, it is hereby ordered and agreed that each Respondent shall comply with the following provisions, including but not limited to all attachments to this Order, and all documents incorporated by reference into this Order, and perform the following actions:

1. Designation of Contractor, Project Coordinator, On-Scene Coordinator or Remedial Project Manager

Respondents shall perform the actions required by this Order themselves or retain a contractor to undertake and complete the requirements of this Order. Respondents shall notify U.S. EPA of

Respondents' qualifications or the name and qualifications of such contractor, whichever is applicable, within 30 calendar days of the effective date of this Order. Respondents shall also notify U.S. EPA of the name and qualifications of any other contractors or subcontractors retained to perform work under this Order at least 10 calendar days prior to commencement of such work. U.S. EPA retains the right to disapprove of the Respondents or any of the contractors and/or subcontractors retained by the Respondents. If U.S. EPA disapproves a selected contractor, Respondents shall retain a different contractor within 10 calendar days following U.S. EPA's disapproval, and shall notify U.S. EPA of that contractor's name and qualifications within 14 calendar days of U.S. EPA's disapproval.

Within 10 calendar days after the effective date of this Order, the Respondents shall designate a Project Coordinator who shall be responsible for administration of all the Respondents' actions required by the Order. Respondents shall submit the designated coordinator's name, address, telephone number, and qualifications to U.S. EPA. U.S. EPA retains the right to disapprove of any Project Coordinator named by the Respondents. If U.S. EPA disapproves a selected Project Coordinator, Respondents shall retain a different Project Coordinator within 14 calendar days following U.S. EPA's disapproval and shall notify U.S. EPA of that person's name and qualifications within 14 calendar days of U.S. EPA's disapproval. Receipt by Respondents' Project Coordinator of any notice or communication from U.S. EPA relating to this Order shall constitute receipt by all Respondents.

The U.S. EPA has designated Karen Cibulskis of the Remedial Response Branch, Region 5, as its Remedial Project Manager ("RPM"). Respondents shall direct all submissions required by this Order to the RPM along with the required copies in accordance with Section XIX (Submittals/Correspondence). All Respondents are encouraged to make their submissions to U.S. EPA on recycled paper (which includes significant post-consumer waste paper content where possible) and using two-sided copies.

U.S. EPA and Respondents shall have the right, subject to the immediately preceding paragraph, to change their designated RPM or Project Coordinator. U.S. EPA shall notify the Respondents, and Respondents shall notify U.S. EPA, as early as possible before such a change is made, but in no case less than 24 hours before such a change. The initial notification may be made orally but it shall be promptly followed by a written notice within 4 calendar days of oral notification.

2. Work to Be Performed

Respondents shall develop and submit to U.S. EPA and the Ohio EPA ("OEPA") an RI/FS report in accordance with the attached Statement of Work ("SOW"). The SOW is incorporated into and made an enforceable part of this Order. The areas of the Site and areas where hazardous substances, pollutants or contaminants have migrated to or have been come to be placed, will be subject to the RI/FS process.

The RI/FS report shall be consistent with, at a minimum, U.S. EPA guidance entitled, "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA" (U.S. EPA, Office of Emergency and Remedial Response, October, 1988) and any other guidance that U.S. EPA uses in conducting a RI/FS.

All work performed under this Consent Order will be under the direction and supervision of qualified personnel. Within thirty (30) days of the effective date of this Order, and before the work outlined below begins, the Respondents will notify U.S. EPA in writing of the names, titles, and qualifications of the primary personnel, including contractors, subcontractors, consultants and laboratories to be used in carrying out such work. With respect to any proposed contractor, the Respondents shall demonstrate that the proposed contractor has a quality system which complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995), by submitting a copy of the proposed contractor's Quality Management Plan (QMP). The QMP should be prepared in accordance with "U.S. EPA Requirements for Quality Management Plans (QA/R-2)," (U.S. EPA/240/B-01/002, March 2001) or equivalent documentation as determined by U.S. EPA. The qualifications of the persons undertaking the work for Respondents will be subject to U.S. EPA's review, for verification that such persons meet minimum technical background and experience requirements. This Order is contingent on Respondents' demonstration to U.S. EPA's satisfaction that Respondents are qualified to perform properly and promptly the actions set forth in this Consent Order. If U.S. EPA disapproves in writing of any person(s)' technical qualifications, Respondents will notify U.S. EPA of the identity and qualifications of the replacements within thirty (30) days of the written notice. If U.S. EPA subsequently disapproves of the replacement(s)' technical qualifications, U.S. EPA reserves the right to terminate this Order and to conduct a complete RI/FS, and to seek reimbursement for costs and penalties from Respondents. During the course of the RI/FS, Respondents will notify U.S. EPA in writing of any changes or additions in the primary personnel

used to carry out such work, providing their names, titles, and qualifications. U.S. EPA will have the same right to approve changes and additions to personnel as it has hereunder regarding the initial notification.

2.0 Community Relations Support and Technical Assistance Plan

U.S. EPA will prepare the Community Relations Support Plan, in accordance with U.S. EPA guidance and the National Contingency Plan (NCP). Respondents shall prepare and implement a Technical Assistance Plan (TAP). The Respondents shall submit the draft TAP to U.S. EPA and Ohio EPA within 30 calendar days after the effective date of this Order. The TAP will provide and administer $50,000 to be used by selected representatives of the community for the purpose of providing technical assistance to the community to interpret and comment on documents developed pursuant to this Order. Within 30 calendar days of U.S. EPA's approval of the TAP, the Respondents shall select the TAP recipient; release $5,000 in start-up funds; confirm the selection of the Technical Advisor, and finalize an appropriate contract with the selected community representative and the Technical Advisor. In addition, the Respondents shall provide U.S. EPA and Ohio EPA with quarterly progress reports concerning the implementation of the TAP. The TAP shall exist until U.S. EPA's issuance of the Record of Decision (ROD) based on the RI/FS conducted under this Order.

2.1 Preliminary Remedial Action Objectives Technical Memorandum

Within 30 calendar days of the effective date of this Order, the Respondents shall submit to U.S. EPA and OEPA for approval a Preliminary Remedial Action Objectives Technical Memorandum that identifies the preliminary remedial action objectives for each actually or potentially contaminated medium at the Site. U.S. EPA will either approve or require revisions to the information and/or objectives in the Preliminary Remedial Actions Objectives Technical Memorandum. If U.S. EPA requires revisions, Respondents shall incorporate all of U.S. EPA's required revisions into the applicable sections of the RI/FS Work Plan, the Sampling and Analysis Plan consisting of the Field Sampling Plan and the Quality Assurance Project Plan, and the Health and Safety Plan.

2.2 RI/FS Work Plan

Within 60 calendar days of U.S. EPA's approval or receipt of U.S. EPA's required revisions to the information and/or objectives in the Preliminary Remedial Action Objectives Technical Memorandum, the Respondents shall submit to U.S. EPA and OEPA for approval a draft RI/FS Work Plan that is consistent with this Order, the SOW

and U.S. EPA's approved or required revisions to the information and/or objectives in the Preliminary Remedial Action Objectives Technical Memorandum. U.S. EPA (in consultation with OEPA) may approve, disapprove, require revisions to, or modify the RI/FS Work Plan. If U.S. EPA requires revisions, Respondents shall submit the revised RI/FS Work Plan incorporating all of U.S. EPA's required revisions within 21 calendar days of receipt of U.S. EPA's notification of the required revisions. Any subsequent revisions to the RI/FS Work Plan, if required, shall be submitted by the Respondents within 15 calendar days of receipt of U.S. EPA's notification of the subsequent required revisions. The revised RI/FS Work Plan shall include a response to comments detailing how each of U.S. EPA's required revisions on the RI/FS Work Plan was incorporated into the revised RI/FS Work Plan.

In the event of U.S. EPA disapproval of the RI/FS Work Plan, Respondents may be deemed in violation of this Order. In such event, U.S. EPA retains the right to terminate this Order, or any part or subpart herein, and conduct a complete RI/FS or any portions thereof, and obtain reimbursement for costs incurred in conducting these activities from the Respondents.

Upon approval by U.S. EPA (in consultation with OEPA), Respondents shall implement all activities required by the RI/FS Work Plan in accordance with the approved schedule. Respondents shall not commence or undertake any support sampling activities either on or off-Site without prior U.S. EPA approval.

2.3 Sampling and Analysis Plan Consisting of a Field Sampling Plan and a Quality Assurance Project Plan, and Quality Assurance and Sampling

Within 60 calendar days of U.S. EPA's approval or receipt of U.S. EPA's required revisions to the information and/or objectives in the Preliminary Remedial Action Objectives Technical Memorandum, the Respondents shall submit to U.S. EPA and OEPA for approval a draft Sampling and Analysis Plan consisting of a Field Sampling Plan and a Quality Assurance Project Plan that is consistent with this Order, the SOW, applicable U.S. EPA guidance documents, including, without limitation, "EPA Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA/600/R-98/018, February 1998), and "EPA Requirements for Quality Assurance Project Plans (QA/R-5)" (EPA 240/B-01/003, March 2001), Region 5 Instructions on the Preparation of A Superfund Division Quality Assurance Project Plan Based on EPA QA/R- 5, Revision 0, U.S. EPA Region 5, June 2000, and U.S. EPA's approved or required revisions to the information and/or objectives in the Preliminary Remedial Action Objectives Technical Memorandum. The Field Sampling Plan and the Quality

Assurance Project Plan may be submitted as separate documents. U.S. EPA (in consultation with OEPA) may approve, disapprove, require revisions to, or modify the Sampling and Analyis Plan, the Field Sampling Plan and/or the Quality Assurance Project Plan. If U.S. EPA requires revisions, Respondents shall submit the revised Sampling and Analysis Plan, Field Sampling Plan and/or Quality Assurance Project Plan incorporating all of U.S. EPA's required revisions within 21 calendar days of receipt of U.S. EPA's notification of the required revisions. Any subsequent revisions to the Sampling and Analysis Plan, the Field Sampling Plan and/or the Quality Assurance Project Plan, if required, shall be submitted by the Respondents within 15 calendar days of receipt of U.S. EPA's notification of the subsequent required revisions. The revised Sampling and Analysis Plan, Field Sampling Plan and/or Quality Assurance Project Plan shall include a response to comments detailing how each of U.S. EPA's required revisions to the Sampling and Analysis Plan, Field Sampling Plan and/or Quality Assurance Project Plan was incorporated into the revised Sampling and Analysis Plan, Field Sampling Plan and/or Quality Assurance Project Plan.

In the event of U.S. EPA disapproval of the Sampling and Analysis Plan, the Field Sampling Plan and/or the Quality Assurance Project Plan, Respondents may be deemed in violation of this Order. In such event, U.S. EPA retains the right to terminate this Order, or any part or subpart herein, and conduct a complete RI/FS or any portions thereof, and obtain reimbursement for costs incurred in conducting these activities from the Respondents.

Upon approval by U.S. EPA (in consultation with OEPA), Respondents shall implement all activities required by the Sampling and Analysis Plan, the Field Sampling Plan and/or the Quality Assurance Project Plan in accordance with the approved schedules. Respondents shall not commence or undertake any support sampling activities either on or off-Site without prior U.S. EPA approval.

During the RI/FS, the Respondents shall assure that work performed, samples taken and analyses conducted conform to the requirements of the Statement of Work, the QAPP and guidance identified therein. Respondents will assure that field personnel used by Respondents are properly trained in the use of field equipment and in chain of custody procedures. Respondents shall only use laboratories which have a documented quality system that complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995) and "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001) or equivalent

documentation as determined by U.S. EPA. U.S. EPA may consider laboratories accredited under the National Environmental Laboratory Accreditation Program (NELAP) to meet the quality system requirements.

Upon request by U.S. EPA, Respondents shall have such a laboratory analyze samples submitted by U.S. EPA for quality assurance monitoring. Respondents shall provide to U.S. EPA the quality assurance/quality control procedures followed by all sampling teams and laboratories performing data collection and/or analysis. Respondents shall also ensure provision of analytical tracking information consistent with, at a minimum, OSWER Directive No. 9240.0-2B, "Extending the Tracking of Analytical Services to PRP-Lead Superfund Sites."

Upon request by U.S. EPA, Respondents shall allow U.S. EPA, OEPA, or their authorized representatives to take split and/or duplicate samples of any samples collected by Respondents or their contractors or agents while performing work under this Order. Respondents shall notify U.S. EPA and OEPA not less than 14 calendar days in advance of any sample collection activity. U.S. EPA and OEPA shall have the right to take any additional samples that they deem necessary.

2.4 Health and Safety Plan

Within 60 calendar days of U.S. EPA's approval or receipt of U.S. EPA's required revisions to the information and/or objectives in the Preliminary Remedial Action Objectives Technical Memorandum, the Respondents shall submit to U.S. EPA and OEPA for review and comment a draft Health and Safety Plan that is consistent with this Order, the SOW and U.S. EPA's approved or required revisions to the information and/or objectives in the Preliminary Remedial Action Objectives Technical Memorandum. The Health and Safety Plan shall ensure the protection of public health and safety during the performance of work under this Order. The Health and Safety Plan shall comply with applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 CFR Part 1910. If U.S. EPA determines it is appropriate, the Health and Safety Plan shall also include contingency planning. Respondents shall incorporate all changes to the plan recommended by U.S. EPA, and implement the plan during the pendency of the RI/FS. If U.S. EPA recommends changes to the Health and Safety Plan, Respondents shall submit the revised Health and Safety Plan incorporating all of U.S. EPA's recommended changes within 21 calendar days of receipt of U.S. EPA's notification of the recommended changes. Any subsequent recommended changes to the Health and Safety Plan, if required, shall be submitted by the Respondents within 15

calendar days of receipt of U.S. EPA's notification of the subsequent recommended changes. The revised Health and Safety Plan shall include a response to comments detailing how each of U.S. EPA's recommended changes to the Health and Safety Plan was incorporated into the revised Health and Safety Plan.

2.5 Site Characterization Technical Memorandum

Within 120 calendar days after U.S. EPA's approval of the RI/FS Work Plan and the Sampling and Analysis Plan (or alternatively U.S. EPA's approval of the RI/FS Work Plan, the Field Sampling Plan and the Quality Assurance Project Plan), or upon written request by U.S. EPA, the Respondents shall submit to U.S. EPA and OEPA for review a Site Characterization Technical Memorandum that is consistent with this Order and the SOW. If U.S. EPA requires revisions to the information in the Site Characterization Technical Memorandum, Respondents shall incorporate all of U.S. EPA's required revisions into the applicable sections of the Human Health Risk Assessment Report, the Ecological Risk Assessment Report, the RI Report and/or the Remedial Action Objectives Technical Memorandum. If U.S. EPA does not have any specific required revisions to the information in the Site Characterization Technical Memorandum, U.S. EPA will provide the Respondents with a Notice to Proceed with the Human Health Risk Assessment, the Ecological Risk Assessment, the RI Report and the Remedial Action Objectives Technical Memorandum.

2.6 Human Health Risk Assessment Report, Ecological Risk Assessment Report and RI Report

Within 60 calendar days after receipt of U.S. EPA's required revisions to the Site Characterization Technical Memorandum or Notice to Proceed, the Respondents shall submit to U.S. EPA and OEPA for approval a draft Human Health Risk Assessment Report, an Ecological Risk Assessment Report and a RI Report that is consistent with this Order, the SOW and U.S. EPA's required revisions to the information in the Site Characterization Technical Memorandum. The Human Health Risk Assessment Report, the Ecological Risk Assessment Report and the RI Report may be submitted as one document or as separate documents. The draft Human Health Risk Assessment Report, Ecological Risk Assessment Report and RI Report shall include a response to comments detailing how each of U.S. EPA's required revisions to the information in the Site Characterization Technical Memorandum was incorporated into the applicable sections of each report.

U.S. EPA (in consultation with OEPA) may approve, disapprove, require revisions to, or modify the draft Human Health Risk

Assessment Report, the Ecological Risk Assessment Report and/or the RI Report. If U.S. EPA requires revisions, Respondents shall submit a revised Human Health Risk Assessment Report, Ecological Risk Assessment Report and/or RI Report incorporating all of U.S. EPA's required revisions within 21 calendar days of receipt of U.S. EPA's notification of the required revisions. Any subsequent revisions to the Human Health Risk Assessment Report, the Ecological Risk Assessment Report and/or the RI Report, if required, shall be submitted by the Respondents within 15 calendar days of receipt of U.S. EPA's notification of the subsequent required revisions. The revised Human Health Risk Assessment Report, Ecological Risk Assessment Report and RI Report shall include a response to comments detailing how each of U.S. EPA's required revisions to the Human Health Risk Assessment Report, Ecological Risk Assessment Report and/or RI Report was incorporated into the revised reports.

In the event of U.S. EPA disapproval of the Human Health Risk Assessment Report, the Ecological Risk Assessment Report and/or the RI Report, Respondents may be deemed in violation of this Order. In such event, U.S. EPA retains the right to terminate this Order, or any part or subpart herein, and conduct a complete RI/FS or any portions thereof, and obtain reimbursement for costs incurred in conducting these activities from the Respondents.

The Human Health Risk Assessment Report, the Ecological Risk Assessment Report and the RI Report shall also include the following certification signed by a person who supervised or directed the preparation of each report:

Under penalty of law, I certify that, to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of this Report, the information submitted is true, accurate, and complete.

2.7 Treatability Studies Technical Memoranda, Work Plans and Reports

If treatability studies are needed or required, the Respondents shall submit the treatability studies technical memoranda, work plans and reports consistent with the requirements in the SOW and the U.S. EPA-approved RI/FS Work Plan.

2.8 Remedial Action Objectives Technical Memorandum

Within 60 calendar days after receipt of U.S. EPA's required revisions to the Site Characterization Technical Memorandum or Notice to Proceed, the Respondents shall submit to U.S. EPA and

OEPA for review, a Remedial Action Objectives Technical Memorandum that is consistent with this Order, the SOW and U.S. EPA's required revisions to the information in the Site Characterization Technical Memorandum. If U.S. EPA requires revisions to the information in the Remedial Action Objectives Technical Memorandum, Respondents shall incorporate all of U.S. EPA's required revisions into the Alternatives Screening Technical Memorandum. If U.S. EPA does not have any specific required revisions to the information in the Remedial Action Objectives Technical Memorandum, U.S. EPA will provide the Respondents with a Notice to Proceed with the Alternatives Screening Technical Memorandum.

2.9 Alternatives Screening Technical Memorandum

Within 21 calendar days after receipt of U.S. EPA's required revisions to the information in the Remedial Action Objectives Technical Memorandum or Notice to Proceed, the Respondents shall submit to U.S. EPA and OEPA for review, an Alternatives Screening Technical Memorandum that is consistent with this Order, the SOW and U.S. EPA's required revisions to the information in the Remedial Action Objectives Technical Memorandum. The Alternatives Screening Technical Memorandum shall include a response to comments detailing how each of U.S. EPA's required revisions to the information in the Remedial Action Objectives Technical Memorandum was incorporated into the Alternatives Screening Technical Memorandum. If U.S. EPA requires revisions to the information in the Alternatives Screening Technical Memorandum, Respondents shall incorporate all of U.S. EPA's required revisions into the Comparative Analysis of Alternatives Technical Memorandum. If U.S. EPA does not have any specific required revisions to the information in the Alternatives Screening Technical Memorandum, U.S. EPA will provide the Respondents with a Notice to Proceed with the Comparative Analysis of Alternatives Technical Memorandum.

2.10 Comparative Analysis of Alternatives Technical Memorandum

Within 21 calendar days after receipt of U.S. EPA's required revisions to the information in the Alternatives Screening Technical Memorandum or Notice to Proceed, the Respondents shall submit to U.S. EPA and OEPA for review, a Comparative Analysis of Alternatives Technical Memorandum that is consistent with this Order, the SOW and U.S. EPA's required revisions to the information in the Alternatives Screening Technical Memorandum. The Comparative Analysis of Alternatives Technical Memorandum shall include a response to comments detailing how each of U.S. EPA's required revisions to the information in the Alternatives

Screening Technical Memorandum was incorporated into the Comparative Analysis of Alternatives Technical Memorandum. If U.S. EPA requires revisions to the information in the Comparative Analysis of Alternatives Technical Memorandum, Respondents shall incorporate all of U.S. EPA's required revisions into the FS Report. If U.S. EPA does not have any specific required revisions to the information in the Comparative Analysis of Alternatives Technical Memorandum, U.S. EPA will provide the Respondents with a Notice to Proceed with the FS Report.

2.11 FS Report

Within 21 calendar days after receipt of U.S. EPA's required revisions to information in the Comparative Analysis of Alternatives Technical Memorandum or Notice to Proceed, the Respondents shall submit to U.S. EPA and OEPA for approval a draft FS Report that is consistent with this Order, the SOW and U.S. EPA's required revisions to the information in the Comparative Analysis of Alternatives Technical Memorandum. The draft FS Report shall include a response to comments detailing how each of U.S. EPA's required revisions to the information in the Comparative Analysis of Alternatives Technical Memorandum was incorporated FS Report.

U.S. EPA (in consultation with OEPA) may approve, disapprove, require revisions to, or modify the draft FS Report. If U.S. EPA requires revisions, Respondents shall submit a revised FS Report incorporating all of U.S. EPA's required revisions within 21 calendar days of receipt of U.S. EPA's notification of the required revisions. Any subsequent revisions to the FS Report, if required, shall be submitted by the Respondents within 15 calendar days of receipt of U.S. EPA's notification of the subsequent required revisions. The revised FS Report shall include a response to comments detailing how each of U.S. EPA's required revisions to the FS Report was incorporated into the revised FS Report.

In the event of U.S. EPA disapproval of the FS Report, Respondents may be deemed in violation of this Order. In such event, U.S. EPA retains the right to terminate this Order, or any part or subpart herein, and conduct a complete RI/FS or any portions thereof, and obtain reimbursement for costs incurred in conducting these activities from the Respondents.

The FS Report shall also include the following certification signed by a person who supervised or directed the preparation of the FS Report:

> Under penalty of law, I certify that, to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of this Report, the information submitted is true, accurate, and complete.

Respondents shall not commence or undertake any remedial actions at the Site without prior U.S. EPA approval.

2.12 Reporting

Respondents shall submit a monthly written progress report to U.S. EPA and OEPA concerning actions undertaken pursuant to this Order, beginning 30 calendar days after the effective date of this Order, until termination of this Order, unless otherwise directed in writing by the RPM. These reports shall describe all significant developments during the preceding period, including the specific work performed and any problems encountered; a copy and summary of the analytical data received during the reporting period; and developments anticipated during the next reporting period, including a schedule of work to be performed, anticipated problems, and planned resolutions of past or anticipated problems. The monthly progress reports shall summarize the field activities conducted each month including, but not limited to drilling and sample locations, depths and descriptions; boring logs; sample collection logs; field notes; problems encountered; solutions to problems; a description of any modifications to the procedures outlined in the RI/FS Work Plan, the FSP, QAPP or Health and Safety Plan, with justifications for the modifications; a summary of all data received during the reporting period and the analytical results; and upcoming field activities. In addition, the Respondents shall provide the RPM or the entity designated by the RPM with all laboratory data within the monthly progress reports and in no event later than 60 days after samples are shipped for analysis.

Any Respondent that owns any portion of the Site shall, at least 30 calendar days prior to the conveyance of any interest in real property at the Site, give written notice of this Order to the transferee and written notice of the proposed conveyance to U.S. EPA and OEPA. The notice to U.S. EPA and OEPA shall include the name and address of the transferee. The party conveying such an interest shall require that the transferee will provide access as described in Section VI.3. (Access to Property and Information).

2.13 Additional Work

In the event that the U.S. EPA or the Respondents determine that additional work is necessary to accomplish the objectives of the Human Health Risk Assessment Report, the Ecological Risk Assessment Report, the RI Report and/or the FS Report, notification of such additional work shall be provided to the other parties in writing. Any additional work which Respondents determine to be necessary shall be subject to U.S. EPA's written approval (in consultation with OEPA) prior to commencement of the additional work. Respondents shall complete, in accordance with standards, specifications, and schedules U.S. EPA has approved, any additional work Respondents have proposed, and which U.S. EPA has approved in writing or that U.S. EPA has determined to be necessary, and has provided written notice of pursuant to this paragraph.

3. Access to Property and Information

Respondents shall provide or obtain access to the Site and off-site areas to which access is necessary to implement this Order, and shall provide access to all records and documentation related to the conditions at the Site and the actions conducted pursuant to this Order. Such access shall be provided to U.S. EPA, OEPA, and their employees, contractors, agents, consultants, designees, representatives. These individuals shall be permitted to move freely at the Site and appropriate off-site areas to which Respondents has access in order to conduct actions which U.S. EPA determines to be necessary. Respondents shall submit to U.S. EPA and OEPA, upon receipt, the results of all sampling or tests and all other data generated by Respondents or their contractor(s), or on the Respondents' behalf during implementation of this Order.

Where work or action under this Order is to be performed in areas owned by or in possession of someone other than Respondents, Respondents shall use their best efforts to obtain all necessary access agreements within 30 calendar days after the effective date of this Order, or as otherwise specified in writing by the RPM. Respondents shall notify U.S. EPA within 4 calendar days if, after using their best efforts, they are unable to obtain such agreements. Respondents shall describe in writing their efforts to obtain access. U.S. EPA may, in its discretion, then assist Respondents in gaining access, to the extent necessary to effectuate the actions described herein, using such means as U.S. EPA deems appropriate. Respondents shall reimburse U.S. EPA for all costs and attorneys fees incurred by the United States in obtaining such access.

4. Record Retention, Documentation, Availability of Information

Respondents shall preserve all documents and information in their possession relating to work performed under this Order, or relating to the hazardous substances found on or released from the Site, for six years following completion of the actions required by this Order. At the end of this six year period and at least 60 calendar days before any document or information is destroyed, Respondents shall notify U.S. EPA that such documents and information are available to U.S. EPA for inspection, and upon request, shall provide the originals or copies of such documents and information to U.S. EPA. In addition, Respondents shall provide copies of any such non-privileged documents and information retained under this Section at any time before expiration of the six year period at the written request of U.S. EPA.

If Respondents assert a privilege in lieu of providing documents, they shall provide U.S. EPA with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the contents of the document, record, or information; and (6) the privilege asserted by Respondents. However, no documents, reports, or other information created or generated pursuant to the requirements of this Order shall be withheld on the grounds that they are privileged.

5. Off-Site Shipments

All hazardous substances, pollutants or contaminants removed off-site pursuant to this Order for treatment, storage or disposal shall be treated, stored, or disposed of at a facility in compliance, as determined by U.S. EPA, with the U.S. EPA Revised Off-Site Rule, 40 CFR § 300.440.

6. Compliance With Other Laws

Respondents shall perform all activities required pursuant to this Order in accordance with all the requirements of all federal and state laws and regulations. U.S. EPA has determined that the activities required by this Order are consistent with the National Contingency Plan ("NCP").

Except as provided in Section 121(e) of CERCLA and the NCP, no permit shall be required for any portion of the activities conducted entirely on-site. Where any portion of the activities

is to be conducted off-site and requires a federal or state permit or approval, the Respondents shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or approvals.

This Order is not, and shall not be construed to be, a permit issued pursuant to any federal or state statue or regulation.

7. Emergency Response and Notification of Releases

If any incident, or change in Site conditions, during the activities conducted pursuant to this Order causes or threatens to cause an additional release of hazardous substances from the Site or an endangerment to the public health, welfare, or the environment, the Respondents shall immediately take all appropriate action to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondents shall also immediately notify the RPM or, in the event of his unavailability, shall notify the Regional Duty Officer, Emergency Response Branch, Region 5 at (312) 353-2318, of the incident or Site conditions. If Respondents fail to respond, U.S. EPA may respond to the release or endangerment and reserve the right to recover costs associated with that response.

Respondents shall submit a written report to U.S. EPA within 10 calendar days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. Respondents shall also comply with any other notification requirements, including those in CERCLA Section 103, 42 U.S.C. § 9603, and Section 304 of the Emergency Planning and Community Right-To-Know Act, 42 U.S.C. § 11004.

VII. AUTHORITY OF THE U.S. EPA REMEDIAL PROJECT MANAGER

The RPMs shall be responsible for overseeing the implementation of this Order. The RPM shall have the authority vested in an RPM and OSC by the NCP, including the authority to halt, conduct, or direct any activities required by this Order, or to direct any other response action undertaken by U.S. EPA or Respondents at the Site. Absence of the RPM from the Site shall not be cause for stoppage of work unless specifically directed by the RPM.

VIII. REIMBURSEMENT OF COSTS

Respondents shall pay all Past Response Costs and Oversight Costs of the United States related to the Site that are not inconsistent with the NCP. As soon as practicable after the effective date of this Order, U.S. EPA will send Respondents a bill for "Past Response Costs" at the Site. U.S. EPA's bill will include an Itemized Cost Summary. "Past Response Costs" are all costs, including, but not limited to, direct and indirect costs and interest, that U.S. EPA, and its employees, agents, contractors, consultants, and other authorized representatives incurred and paid with regard to the Site prior to the effective date of this Order.

In addition, U.S. EPA will send Respondents a bill for "oversight costs" on an annual basis. "Oversight Costs" are all costs paid by U.S. EPA after the effective date of this Order relating to this Order, including, but not limited to direct and indirect costs related to overseeing work performed under this Order, and reviewing or developing plans, reports and other items pursuant to this Order.

Respondents shall, within 45 calendar days of receipt of a bill from U.S. EPA, remit a cashier's or certified check for the amount of the bill made payable to the "Hazardous Substance Superfund," to the following address:

U.S. Environmental Protection Agency
Superfund Accounting
P.O. Box 70753
Chicago, Illinois 60673

Respondents shall simultaneously transmit a copy of the check to the Director, Superfund Division, U.S. EPA Region 5, 77 West Jackson Blvd., Chicago, Illinois, 60604-3590. Payments shall be designated as "Response Costs - South Dayton Dump Site" and shall reference the payor(')s(') name and address, the EPA site identification number B5Y7, and the docket number of this Order. In the event that any payment is not made within the deadlines described above, Respondents shall pay interest on the unpaid balance. Interest is established at the rate specified in Section 107(a) of CERCLA, 42 U.S.C. § 9607(a). The interest shall begin to accrue on the date of the Respondents' receipt of the bill (or for Past Response Costs, on the effective date of this Order). Interest shall accrue at the rate specified through the date of the payment. Payments of interest made under this paragraph shall be in addition to such other remedies or sanctions available to

the United States by virtue of Respondents' failure to make timely payments under this Section.

If any dispute over costs is resolved before payment is due, the amount due will be adjusted as necessary. If the dispute is not resolved before payment is due, Respondents shall pay the full amount of the uncontested costs into the Hazardous Substance Fund as specified above on or before the due date. Within the same time period, Respondents shall pay the full amount of the contested costs into an interest-bearing escrow account. Respondents shall simultaneously transmit a copy of both checks to the RPM. Respondents shall ensure that the prevailing party or parties in the dispute shall receive the amount upon which they prevailed from the escrow funds plus interest within 20 calendar days after the dispute is resolved.

IX. DISPUTE RESOLUTION

The parties to this Order shall attempt to resolve, expeditiously and informally, any disagreements concerning this Order.

If the Respondents object to any U.S. EPA action taken pursuant to this Order, including billings for response costs, the Respondents shall notify U.S. EPA in writing of their objection(s) within 10 calendar days of such action, unless the objection(s) has (have) been informally resolved. This written notice shall include a statement of the issues in dispute, the relevant facts upon which the dispute is based, all factual data, analysis or opinion supporting Respondents' position, and all supporting documentation on which the Respondents rely (hereinafter the "Statement of Position").

U.S. EPA and Respondents shall within 15 calendar days of U.S. EPA's receipt of the Respondents' Statement of Position, attempt to resolve the dispute through formal negotiations ("Negotiation Period"). The Negotiation Period of 15 calendar days may be extended at the sole discretion of U.S. EPA. U.S. EPA's decision regarding an extension of the Negotiation Period shall not constitute a U.S. EPA action subject to dispute resolution or a final Agency action giving rise to judicial review.

An administrative record of any dispute under this Section shall be maintained by U.S. EPA. The record shall include the written notification of such dispute, and the Statement of Position served pursuant to the preceding paragraph.

Any agreement reached by the parties pursuant to this Section shall be in writing, signed by all parties, and shall upon the signature by the parties be incorporated into and become an enforceable element of this Order. If the parties are unable to reach an agreement within the Negotiation Period the Director of the U.S. EPA Superfund Division, Region 5, will issue a written decision on the dispute to the Respondents. The decision of U.S. EPA shall be incorporated into and become an enforceable element of this Order upon Respondents' receipt of the decision regarding the dispute.

Respondents' obligations under this Order shall not be tolled by submission of any objection for dispute resolution under this Section. Following resolution of the dispute, as provided by this Section, Respondents shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with U.S. EPA's decision, whichever occurs. No U.S. EPA decision made pursuant to this Section shall constitute a final Agency action giving rise to judicial review.

X. FORCE MAJEURE

Respondents agree to perform all requirements under this Order within the time limits established under this Order, unless the performance is delayed by a force majeure. For purposes of this Order, a force majeure is defined as any event arising from causes beyond the control of Respondents that delays or prevents performance of any obligation under this Order despite Respondents' best efforts to fulfill the obligation. Force majeure does not include financial inability to complete the work, increased cost of performance, or normal weather events.

Respondents shall notify U.S. EPA orally within 24 hours after Respondents become aware of any event that Respondents contend constitute a force majeure, and in writing within 7 calendar days after Respondents become aware of any events which constitute a force majeure. Such notice shall: identify the event causing the delay or anticipated delay; estimate the anticipated length of delay, including necessary demobilization and re-mobilization; state the measures taken or to be taken to minimize the delay; and estimate the timetable for implementation of the measures. Respondents shall take all reasonable measures to avoid and minimize the delays. Failure to comply with the notice provision of this Section shall be grounds for U.S. EPA to deny Respondents an extension of time for performance. Respondents shall have the burden of demonstrating by a preponderance of the evidence that the event is a force majeure, that the delay is warranted under

the circumstances, and that best efforts were exercised to avoid and mitigate the effects of the delay to the satisfaction of U.S. EPA.

If U.S. EPA determines a delay in performance of a requirement under this Order is or was attributable to a force majeure, the time period for performance of that requirement shall be extended as deemed necessary by U.S. EPA. Such an extension shall not alter Respondents' obligation to perform or complete other tasks required by the Order which are not directly affected by the force majeure.

XI. STIPULATED AND STATUTORY PENALTIES

For each calendar day, or portion thereof, that Respondents fail to fully perform any requirement of this Order in accordance with the schedule established pursuant to this Order, Respondents shall be liable as follows:

Deliverable/Activity	Penalty For Days 1-7	Penalty For > 7 Days
Failure to Submit Draft RI/FS Work Plan, Draft Sampling Analysis Plan, Draft Field Sampling Plan, Draft Quality Assurance Project Plan, Draft Human Health Risk Assessment Report, Draft Ecological Risk Assessment Report, Draft RI Report or Draft FS Report	$500/Day	$1250/Day
Failure to Submit Revised RI/FS Work Plan, Revised Sampling Analysis Plan, Revised Field Sampling Plan, Revised Quality Assurance Project Plan, Revised Human Health Risk Assessment Report, Revised Ecological Risk Assessment Report, Revised RI Report or Revised FS Report	$500/Day	$1250/Day

Deliverable/Activity	Penalty For Days 1-7	Penalty For > 7 Days
Failure to Submit Preliminary Remedial Action Objectives Technical Memorandum, Site Characterization Technical Memorandum, Remedial Action Objectives Technical Memorandum, Alternatives Screening Technical Memorandum or Comparative Analysis of Alternatives Technical Memorandum	$500/Day	$1250/Day
Failure to Submit Analytical Data	$500/Day	$1000/Day
Late Submittal of Progress Reports; Treatability Study Technical Memoranda, Work Plans and Reports; or Other Miscellaneous Reports or Submittals	$250/Day	$500/Day
Failure to Meet Any Scheduled Deadline in the Order	$250/Day	$500/Day

Upon receipt of written demand by U.S. EPA, Respondents shall make payment to U.S. EPA within 20 calendar days and interest shall accrue on late payments in accordance with Section VIII of this Order ("Reimbursement of Costs").

Even if violations are simultaneous, separate penalties shall accrue for separate violations of this Order. Penalties accrue and are assessed per violation per day. Penalties shall accrue regardless of whether U.S. EPA has notified Respondents of a violation or act of noncompliance. The payment of penalties shall not alter in any way Respondents' obligation(s) to complete the performance of the work required under this Order. Stipulated penalties shall accrue, but need not be paid, during any dispute resolution period concerning the particular penalties at issue. If Respondents prevail upon resolution, Respondents shall pay only such penalties as the resolution requires. In its unreviewable discretion, U.S. EPA may waive its rights to demand all or a portion of the stipulated penalties due under this Section.

The stipulated penalties set forth above shall not be the sole or exclusive remedy for violations of this Order and shall not preclude U.S. EPA from pursuing any other remedy or sanctions which are available to the agencies because of the Respondents' failure to comply with this Consent Order. Should Respondents

violate this Order or any portion hereof, U.S. EPA may carry out all or part of the required actions unilaterally, pursuant to Section 104 of CERCLA, 42 U.S.C. §§ 9604. Payment of stipulated penalties does not alter Respondents' obligation to complete performance under this Consent Order.

XII. RESERVATION OF RIGHTS

Except as specifically provided in this Order, nothing herein shall limit the power and authority of U.S. EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants, contaminants, or oil or hazardous or solid waste on, at, or from the Site. Further, nothing herein shall prevent U.S. EPA from seeking legal or equitable relief to enforce the terms of this Order. U.S. EPA also reserves the right to take any other legal or equitable action as it deems appropriate and necessary, or to require the Respondents in the future to perform additional activities pursuant to CERCLA or any other applicable law. U.S. EPA reserves its rights in regard to claims, prior actions, orders, or agreements with Respondents. The covenant not to sue by U.S. EPA set forth in Section XIV does not pertain to any matters other than those expressly identified therein. The United States and U.S. EPA reserve, and this Agreement is without prejudice to, all rights against the Respondents with respect to all other matters, including but not limited to:

a. liability for failure of Respondents to meet a requirement of this Order by Consent;

b. liability for costs incurred or to be incurred that are not Past Response Costs or Oversight Costs as defined in Section VII of this Order;

c. liability for injunctive relief or administrative order enforcement under Section 106 of CERCLA, 42 U.S.C. § 9606, excluding work performed under the terms of this Order;

d. criminal liability; and

e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments.

XIII. OTHER CLAIMS

By issuance of this Order, the United States and U.S. EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondents. The United States or U.S. EPA shall not be a party or be held out as a party to any contract entered into by the Respondents or their directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out activities pursuant to this Order.

Except as expressly provided in Section XIV (Covenant Not To Sue), nothing in this Order constitutes a satisfaction of or release from any claim or cause of action against the Respondents or any person not a party to this Order, for any liability such person may have under CERCLA, other statutes, or the common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106(a) or 107(a) of CERCLA, 42 U.S.C. §§ 9606(a), 9607(a).

This Order does not constitute a preauthorization of funds under Section 111(a)(2) of CERCLA, 42 U.S.C. § 9611(a)(2). The Respondents waive any claim to payment under Sections 106(b), 111, and 112 of CERCLA, 42 U.S.C. §§ 9606(b), 9611, and 9612, against the United States or the Hazardous Substance Superfund arising out of any action performed under this Order.

No action or decision by U.S. EPA pursuant to this Order shall give rise to any right to judicial review except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XIV. COVENANT NOT TO SUE

Except as otherwise specifically provided in this Order, upon issuance of the U.S. EPA notice referred to in Section XVIII (Notice of Completion), U.S. EPA covenants not to sue Respondents for judicial imposition of damages or civil penalties or to take administrative action against Respondents for any failure to perform actions agreed to in this Order except as otherwise reserved herein.

Except as otherwise specifically provided in this Order, in consideration and upon Respondents' payment of the Past Response Costs and Oversight Costs specified in Section VIII of this Order, U.S. EPA covenants not to sue or to take administrative action against Respondents under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), for recovery of Past Response Costs and Oversight Costs

incurred by the United States in connection with this action or this Order. This covenant not to sue shall take effect upon the receipt by U.S. EPA of the payments required by Section VIII (Reimbursement of Costs).

These covenants not to sue are conditioned upon the complete and satisfactory performance by Respondents of their obligations under this Order. These covenants not to sue extend only to the Respondents and do not extend to any other person.

XV. CONTRIBUTION PROTECTION

With regard to claims for contribution against Respondents for matters addressed in this Order, the Parties hereto agree that the Respondents are entitled to protection from contribution actions or claims to the extent provided by Section 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4). Nothing in this Order precludes Parties to this Order from asserting any claims, causes of action or demands against any persons not parties to this Order for indemnification, contribution, or cost recovery.

XVI. INDEMNIFICATION

Respondents agree to indemnify, save and hold harmless the United States their agencies, departments, officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action: (A) arising from, or on account of, acts or omissions of Respondents and Respondents' officers, heirs, directors, employees, agents, contractors, subcontractors, receivers, trustees, successors or assigns, in carrying out actions pursuant to this Order; (B) for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between (any one or more of) Respondents, and any persons for performance of work on or relating to the Site, including claims on account of construction delays; and (C) for any claim or cause of action against the United States based on negligent action taken solely and directly by U.S. EPA including oversight, modification and/or approval of plans or activities of the Respondents. The U.S. EPA shall not be construed to be a party to any contract involving the Respondents at the Site.

XVII. MODIFICATIONS

Except as otherwise specified in Section VI. 2. (Work To Be Performed), if any party believes modifications to any plan or schedule are necessary during the course of this project, they shall conduct informal discussions regarding such modifications with the other parties. Any agreed-upon modifications to any plan or schedule shall be memorialized in writing within 10 calendar days; however, the effective date of the modification shall be the date of the RPM's oral direction. Any other requirements of this Order may be modified in writing by mutual agreement of the parties. Any modification to this Order shall be incorporated into and made an enforceable part of this Order.

If Respondents seek permission to deviate from any approved plan or schedule, Respondents' Project Coordinator shall submit a written request to U.S. EPA for approval (in consultation with OEPA) outlining the proposed modification and its basis.

No informal advice, guidance, suggestion, or comment by U.S. EPA regarding reports, plans, specifications, schedules, or any other writing submitted by the Respondents shall relieve Respondents of their obligations to obtain such formal approval as may be required by this Order, and to comply with all requirements of this Order unless it is formally modified.

XVIII. NOTICE OF COMPLETION

When U.S. EPA determines that all work, including the RI/FS Report, has been fully performed in accordance with this Order, except for certain continuing obligations required by this Order (e.g., record retention, payment of costs), U.S. EPA will provide written notice to the Respondents.

XIX. SUBMITTALS/CORRESPONDENCE

Any notices, documents, information, reports, plans, approvals, disapprovals, or other correspondence required to be submitted from one party to another under this Order, shall be deemed submitted either when hand-delivered or as of the date of receipt by certified mail/return receipt requested, express mail, or facsimile in accordance with this section.

Correspondence and communications from U.S. EPA and OEPA shall be addressed to:

All correspondence, communication, and submittals from Respondents shall be directed to the following and additional individuals they identify:

Karen Cibulskis
Remedial Project Manager
United States Environmental Protection Agency
77 West Jackson Blvd., Mailcode SR-6J
Chicago, Illinois 60604-3590
Phone (312) 886-1843
FAX (312) 886-4071
Email: cibulskis.karen@epa.gov

AND

Matt Justice
Ohio Environmental Protection Agency
Division of Emergency and Remedial Response
Ohio Environmental Protection Agency
401 E. 5th Street
Dayton, OH 45402
Phone:(937) 285-6040
E-mail: matt.justice@epa.state.oh.us

With copies to:

Thomas Nash
Associate Regional Counsel
U.S. EPA - Region 5
77 West Jackson Boulevard, C-14J
Chicago, Illinois 606064-3590
Phone (312) 886-0552
FAX (312) 886-0747
E-mail: nash.thomas@epa.gov

XX. SEVERABILITY

If a court of competent jurisdiction issues an order that invalidates any provision of this Order or finds that Respondents have sufficient cause not to comply with one or more provisions of this Order, Respondents shall remain bound to comply with all provisions of this Order not invalidated by the court's order.

XXI. EFFECTIVE DATE AND COMPUTATION OF TIME

This Order shall be effective upon signature by the Director, Superfund Division, U.S. EPA Region 5. For the purposes of this Order, the term "day" shall mean a calendar day. In computing any period of time under this Order, where the last day of the period would fall on a Saturday or Sunday, the period shall run until noon, Central Time of the following Monday.

IN THE MATTER OF:

SOUTH DAYTON DUMP SITE MORAINE OHIO

SIGNATORIES

Each undersigned representative of a signatory to this Administrative Order on Consent certifies that he or she is fully authorized to enter into the terms and conditions of this Order and to bind such signatory, its directors, officers, employees, agents, successors and assigns, to this document.

Agreed this _____ day of _____, 2002.

By _____

By _____

By _____

IT IS SO ORDERED AND AGREED

BY:_____ DATE:_____

William E. Muno, Director
Superfund Division United States
Environmental Protection Agency
Region 5

Enclosure 2

South Dayton Dump Site

Statement of Work

STATEMENT OF WORK
FOR A REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
AT THE SOUTH DAYTON DUMP SITE
MORAINE, OHIO

PURPOSE:
This Statement of Work (SOW) sets forth the requirements for conducting a Remedial Investigation and Feasibility Study (RI/FS) at the 40-acre South Dayton Dump Site located at 1976 Dryden Road in Moraine, Ohio. The RI shall evaluate the nature and extent of hazardous substances or contaminants at the property and in any off-property areas where hazardous substances or contaminants from the property or from past operations at the property have or may have come to be located ("the Site"). The RI shall also assess the risk which these hazardous substances or contaminants present for human health and the environment. The FS Report shall evaluate alternatives for addressing the impact to human health and the environment from hazardous substances or contaminants at the Site.

The RI/FS shall comply with all requirements and guidance for RI/FS studies and reports, and shall also comply with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA), and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), Final Rule (40 CFR Part 300). At a minimum, the Respondents shall prepare and complete the RI and FS Reports consistent with the *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA* (EPA/540/G-89/004, October 1988) (RI/FS Guidance), *Conducting Remedial Investigations/Feasibility Studies for CERCLA Municipal Landfill Sites* (EPA/540/P-91/001, February 1991), and any other guidance that the United States Environmental Protection Agency (U.S. EPA) uses in conducting or submitting deliverables for a RI/FS, as well as any additional requirements in the Administrative Order on Consent (AOC). The RI/FS Guidance describes the report format and the required report content. Numerical references to the appropriate sections of the RI/FS Guidance follow the section headings throughout this SOW. U.S. EPA will provide any guidance, evolving or published during the conduct of the RI/FS, to the Respondents in a reasonable time frame prior to the due date for the submittal of applicable interim or final deliverables identified in this SOW. A partial list of guidance is included at the end of this SOW.

The Respondents shall submit all documents or deliverables required as part of this SOW to the U.S. EPA, with a copy to the Ohio Environmental Protection Agency (Ohio EPA), for review and approval by U.S. EPA after consultation with the Ohio EPA.

The Respondents shall furnish all personnel, materials, and services necessary for, or incidental to, performing the RI/FS at the Site, except as otherwise specified herein.

At the completion of the RI/FS, U.S. EPA will be responsible for selecting a Site remedy, and will document the selected remedy in a Record of Decision (ROD). The remedial action selected by U.S. EPA will meet the cleanup standards specified in CERCLA Section 121. That is, the selected remedial action will protect human health and the environment; will comply with, or include a waiver of, applicable or relevant and appropriate requirements of other laws; will be cost-effective; will use permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable; and will address the statutory preference for treatment as a principal element. The final RI/FS Reports, as adopted by U.S. EPA, shall, with the administrative record, form the basis for the selection of the Site remedy and shall provide the information necessary to support the development of the ROD.

As specified in CERCLA Section 104(a)(1), as amended by SARA, U.S. EPA and Ohio EPA will provide oversight of the Respondents' activities throughout the RI/FS, including all field sampling activities. The Respondents shall support U.S. EPA's and Ohio EPA's initiation and conduct of activities related to the implementation of oversight activities.

SCOPE:
The tasks Respondents shall complete as part of this RI/FS are:

Task 1: Project Scoping and RI/FS Planning Documents
Task 2: Community Relations **and Technical Assistance Plan**
Task 3: Site Characterization
Task 4: Remedial Investigation Report
Task 5: Treatability Studies
Task 6: Development and Screening of Alternatives (Technical Memorandum)
Task 7: Detailed Analysis of Alternatives (FS Report)
Task 8: Progress Reports

TASK 1: PROJECT SCOPING AND RI/FS PLANNING DOCUMENTS

Scoping is the initial planning process of the RI/FS and is initiated by U.S. EPA prior to issuing special notice. During this time, the Site-specific objectives of the RI/FS, including the preliminary remedial action objectives, are determined by U.S. EPA. Scoping is initiated prior to negotiations between the PRPs and U.S. EPA, and is continued, repeated as necessary, and refined throughout the RI/FS process. In addition to developing the Site-specific objectives of the RI/FS, U.S. EPA will determine a general management approach for the Site.

Consistent with the general management approach, the Respondents and U.S. EPA will plan the specific project scope. The Respondents shall document the specific project scope in the RI/FS Planning Documents. Because the work required to perform a RI/FS is not fully known at the onset, and is phased according to a Site's complexity

and the amount of available information, it may be necessary to modify the Planning Documents during the RI/FS to satisfy the objectives of the study.

The preliminary objectives for the remedial action at the Site, based on currently available information [see Chapter 4 of *Conducting Remedial Investigations/Feasibility Studies for CERCLA Municipal Landfill Sites* (EPA/540/P-91/001, February 1991) and Section 1.2 of *Presumptive Response Strategy and Ex-Situ Treatment Technologies for Contaminated Groundwater at CERCLA Sites* (EPA 540-R-96-023, October 1996)] are:

- Prevent direct contact with landfill contents;
- Minimize infiltration and resulting contaminant leaching to groundwater;
- Control surface water runoff and erosion;
- Treat or eliminate high levels of hazardous substances, pollutants, or contaminants (hot spots);
- Collect and treat contaminated groundwater and leachate to contain the contaminant plume and prevent further migration from the source area;
- Control and treat landfill gas;
- Prevent exposure to contaminated groundwater above acceptable risk levels;
- Prevent or minimize further migration of the groundwater contaminant plume and actual or potential impacts to drinking water supplies and/or ecosystems (e.g., groundwater impacts to surface water, sediments, organisms and/or the food chain);
- Return the groundwater to its expected beneficial uses wherever practicable within a reasonable time frame for the site;
- Remediate contaminated surface water and sediments;
- Remediate contaminated wetland areas;
- Mitigate or abate other situations or factors that may pose a threat to public health, welfare, or the environment.

The strategy for achieving the remedial objectives and for the general management of the site will include the following. The Respondents shall:

- Conduct a remedial investigation to fully determine the nature and extent of the release or threatened release of hazardous substances, pollutants, or contaminants from the Site. In performing this investigation, the Respondents shall gather sufficient data, samples, and other information to fully characterize the nature and extent of the contamination at the Site and to support the human health and ecological risk assessments conducted for this Site.

- Perform a feasibility study to identify and evaluate alternatives for the appropriate extent of remedial action to prevent or mitigate the migration or the release or threatened release of hazardous substances, pollutants, or contaminants from the Site.

- If the remedial investigation reveals contamination in specific, identifiable areas of concern which may present an imminent and substantial endangerment to human health or the environment, the Respondents may propose or U.S. EPA may require an interim response action to address the threat identified. The Respondents may propose, subject to U.S. EPA review, comment and approval, with modifications if necessary, interim response actions that, if implemented, will protect human health and the environment and may contribute to the effectiveness of the remedial action eventually selected for this Site.

When scoping the specific aspects of the project, the Respondents shall meet with U.S. EPA to discuss all project planning decisions and special concerns associated with the Site. The Respondents shall perform the following activities as a function of the project planning process.

1.1. Site Background (RI/FS Guidance Section 2.2)

The Respondents shall gather and analyze the existing Site background information and shall conduct a Site visit to assist in planning the scope of the RI/FS.

1.1.1 *Collect and Analyze Existing Data* (RI/FS Guidance Section 2.2.2)

Before planning the RI/FS activities, the Respondents shall thoroughly compile and review all existing Site data. Specifically, this includes presently available data relating to the varieties and quantities of hazardous substances at the Site, past disposal practices, the results of previous sampling activities, and U.S. EPA's air photo analysis of the Site. Existing information about the Site is available in the 1991 Screening Site Inspection Report, the 1995 Focused Site Inspection Prioritization, the 1996 Site Team Evaluation Prioritization Report and additional information submitted to U.S. EPA by the landfill owners. The Respondents shall refer to Table 2-1 of the RI/FS Guidance for a comprehensive list of data collection information sources. The Respondents shall use this information to determine the additional data needed to characterize the site and

evaluate risks, better define potential applicable or relevant and appropriate requirements (ARARs), and develop a range of preliminarily identified remedial alternatives. The Respondents shall establish Data Quality Objectives (DQOs) subject to U.S. EPA approval which specify the usefulness of existing data. U.S. EPA will make all decisions on the necessary data and DQOs.

1.1.2. *Conduct Site Visit*

The Respondents shall visit the Site during the project scoping phase to develop a better understanding of the Site, and focus on the sources and the areas of contamination, as well as potential exposure pathways and receptors at the Site. During the Site visit, the Respondents shall observe, to the extent possible, the site's physiography, hydrology, geology, and demographics, as well as natural resource, ecological and cultural features. The Respondents shall use this information to better scope the project, to determine the extent of additional data necessary to characterize the Site, to evaluate risks, better define potential ARARs, and narrow the range of preliminarily identified remedial alternatives.

1.2 Project Planning (RI/FS Guidance Section 2.2)

Once the Respondents have collected and analyzed existing data and conducted a Site visit, the Respondents shall plan the specific project scope. Project planning activities include those tasks described below as well as identifying data needs, developing a work plan, designing a data collection program and a quality assurance plan, and identifying health and safety protocols. These tasks are described in Section 1.3 of this Task since they may result in the development of specific required deliverables.

1.2.1 *Identify Data Needs and Design a Data Collection Program* (RI/FS Guidance Sections 2.2.6, 2.2.7, 3.2.2, 3.2.3, 3.2.4 and 3.2.5)

The Respondents shall analyze the currently available data and information and prepare a site conceptual model. Based on the currently available data and information and the site conceptual model, the Respondents shall determine which areas of the Site and other nearby areas require additional data and/or evaluation to characterize site conditions, define the extent of hazardous substances or contaminants at the Site, support modeling efforts, evaluate risks to human health and the environment, and develop and evaluate remedial alternatives. (One data gap is that most of the existing groundwater monitoring wells are screened 5 to 10 or more feet below the water table). The Respondents shall design a data collection program that includes, but is not limited to, the activities listed below. The Respondents shall develop the data collection program consistent with Sections 3.2.2, 3.2.3, 3.2.4 and 3.2.5 of the RI/FS Guidance; U.S. EPA's *Risk Assessment Guidance for Superfund (RAGS) Volume I - Human Health Evaluation Manual Part D, Standardized Planning,*

Reporting, and Review of Superfund Risk Assessments (Final, EPA 540-R-97-033, OSWER 9285.7-01D, December 2001); *Conducting Remedial Investigations/Feasibility Studies for CERCLA Municipal Landfill Sites* (EPA/540/P-91/001, February 1991); and any other applicable guidance. The Respondents shall incorporate the sampling results into the Site Characterization Technical Memorandum (Task 3.1), the Remedial Investigation Report (Task 4), the Human Health and Ecological Risk Assessments (Tasks 3.2 and 3.3) and the Feasibility Study (Task 7). Where modeling or screening is appropriate, the Respondents shall identify such models or screening methods to U.S. EPA in the Planning Documents (Task 1.3) or in technical memoranda prior to their use. The Planning Documents or technical memoranda shall justify the basis and technical appropriateness for using the proposed model(s) or screening methods, and, for modeling efforts, shall include a detailed description of the data that is needed and that is either available or that the Respondents shall collect to support the modeling. The Respondents shall provide all modeling inputs and outputs to U.S. EPA with a sensitivity analysis. If requested, the Respondents shall also provide U.S. EPA with the programming used in the modeling, including any proprietary programs.

1.2.1.1 Waste Characterization

The RI shall include an investigation to characterize the waste materials at the Site and to identify and characterize any hot spots. This shall include an analysis of current information and data on past disposal practices at the Site. For buried wastes, the Respondents shall use methods such as test pits, trenches and/or soil borings to determine waste depths, thicknesses and volume; the elevation of the underlying natural soil layer; and the extent of cover over fill areas and hazardous substances or contaminants when such information is not already known. The RI shall include geophysical characterization methods, such as ground penetrating radar, magnetometry or tomography to further delineate potential removal areas. In addition to the hazardous substances or contaminants characterization described above, the RI shall include leaching tests to address the potential leaching of constituents from the waste materials to the environment.

1.2.1.2 Surface and Subsurface Soils Investigation

The RI shall include an investigation to determine the extent of hazardous substances or contaminants in surface and subsurface soils at the Site and to identify and characterize any hot spots. This includes areas where airborne hazardous substances or contaminants may have been deposited as a result of open burning or burning in the air curtain destructor. The RI shall include investigations to determine the

leachability of Site hazardous substances or contaminants into the groundwater. The RI shall include the collection of background soil samples for use in determining whether any hazardous substances or contaminants detected in Site soil are related to local and/or regional background conditions.

1.2.1.3 Leachate Investigation

The RI shall include a leachate investigation to determine if the highest seasonal water table intersects the waste material and whether there is leachate within the fill, even if the wastes are above the water table. The Respondents shall define surface water drainage patterns; calculate a water balance; determine soil, climatological and waste characteristics; and determine the depth to groundwater and groundwater flow direction and velocity. The leachate investigation shall include the collection of direct soil solute samples (e.g., using lysimeters or other methods) for chemical analysis. The Respondents shall use the results of the leachate investigation to assist in identifying and characterizing any hot spots and to determine contaminant fate and transport.

1.2.1.4 Hydrogeologic Investigation

The RI shall include investigative tasks to determine the degree of groundwater hazards; the mobility and fate and transport of groundwater pollutants; discharge and recharge areas; regional and local groundwater flow direction and quality; the local uses of groundwater including the number, location, depth, and use of nearby private and municipal wells; and current and potential future impacts to any and all private and municipal wells from the Site and to surface water and sediment in the Great Miami River, the large water-filled gravel pit in the southwest area of the Site and any other surface water bodies. The Respondents shall develop a strategy to determine the horizontal and vertical distribution of hazardous substances or contaminants in the groundwater and the extent and fate and transport of any groundwater plume(s) containing hazardous substances or contaminants. The RI shall also include other hydraulic tests such as slug tests, pump tests and grain size analyses to assist in evaluating contaminant fate and transport and in developing potential remediation options. The RI shall include upgradient (background) samples and, if directed by U.S. EPA, samples from private and municipal wells. Where modeling is appropriate, the Respondents shall identify such models to U.S. EPA in a technical memorandum prior to their use. The Respondents shall support any discussions or evaluations of monitored natural attenuation with data collected consistent with the methods and protocols in the U.S. EPA

Region 5 Framework for Monitored Natural Attenuation Decisions for Groundwater (September 2000).

1.2.1.5 Surface Water, Sediment and Floodplain Investigation

The RI shall include an investigation to determine the impacts from the Site on surface water, sediments and the floodplain of the Great Miami River; surface water and sediments in the large water-filled gravel pit in the southwest area of the Site; surface water and sediments in the large depression area in the west-central area of the Site if water is present in this area at the time of sampling; and any other creeks and/or wetlands that are or may be impacted by the Site. The RI shall include the collection of background surface water, sediment and floodplain samples for use in determining whether any hazardous substances or contaminants detected in surface water, sediment or the floodplain are related to local and/or regional background conditions.

1.2.1.6 Landfill/Soil Gas and Air Investigation

The RI shall include landfill/soil gas surveys for the areas on and around the fill areas of the Site and above areas where vapors may migrate from groundwater. The RI shall also include an investigation to determine the extent of atmospheric hazardous substances or contaminants from the various potential source areas at the Site. The investigation shall determine subsurface migration patterns and address the tendency of the substances identified through the waste characterization and other media sampling to enter the atmosphere. The investigation shall determine local wind patterns; the explosive hazards; and the degree of hazard posed by the direct inhalation of hazardous substances or contaminants in the air and through gas migration and vapor intrusion into structures (existing and future). The Respondents shall also use the results of the landfill/soil gas and air investigation to assist in identifying and characterizing any hot spots.

1.2.1.7 Ecological Investigation

The RI shall include an ecological investigation to assess the impact to aquatic and terrestrial ecosystems within and adjacent to the Site as a result of the disposal, release, and migration of hazardous substances or contaminants. These ecosystems include the Great Miami River and floodplain areas, the large water-filled gravel pit in the southwest area of the Site, and any other creeks and/or wetlands that are or may be impacted by the Site. The RI shall include a description of the habitats and the ecosystems affected; an evaluation of toxicity; an assessment of

endpoint organisms; the exposure pathways; an evaluation of potential ecological risk; the relevant exposure pathways; and an assessment of ecological concerns. The RI shall also include additional field work (e.g., toxicity testing, biological surveys, bioaccumulation collections, etc.) needed to support the assessment. The Respondents shall conduct the ecological investigation and assessment in accordance with U.S. EPA guidance, including *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments* (June 5, 1997; EPA 540-R-97-006).

1.2.1.8 Evaluate and Document the Need for Treatability Studies (RI/FS Guidance Section 2.2.4)

If the Respondents or U.S. EPA identify remedial actions that involve treatment, the Respondents shall conduct treatability studies unless the Respondents satisfactorily demonstrate to U.S. EPA that such studies are not needed. When treatability studies are needed, the Respondents shall plan initial treatability testing activities (such as research and study design) to occur concurrently with Site characterization activities (see Task 1.3.1 and Task 5).

1.2.2 *Refine and Document Preliminary Remedial Action Objectives and Alternatives and Begin Preliminary Identification of Potential ARARs (RI/FS Guidance Sections 2.2.3 and 2.2.5)*

Once the existing site information has been analyzed and the Respondents and U.S. EPA have developed an understanding of potential site risks, the Respondents shall review and, if necessary, refine the remedial action objectives that have been identified by U.S. EPA for each actually or potentially contaminated medium. The Respondents shall document the revised preliminary remedial action objectives in a Preliminary Remedial Action Objectives Technical Memorandum, subject to U.S. EPA approval. The Respondents shall submit the Preliminary Remedial Action Objectives Technical Memorandum within 30 days of the effective date of the AOC. The Respondents shall fully and satisfactorily address and incorporate U.S. EPA's comments on the Preliminary Remedial Action Objectives Technical Memorandum in the RI/FS Planning Documents (Task 1.3). The Respondents shall then identify a preliminary range of broadly defined potential remedial action alternatives and associated technologies relevant to the Site characteristics. The range of potential alternatives will encompass, where appropriate, alternatives in which treatment significantly reduces the toxicity, mobility, or volume of the waste; alternatives that involve containment with little or no treatment; and a no-action alternative.

1.2.3 *Begin Preliminary Identification of Potential ARARs (RI/FS Guidance Section 2.2.5)*

The Respondents shall conduct a preliminary identification of potential state and federal ARARs (chemical-specific, location-specific and action-specific) to assist in refining remedial action objectives and in the initial identification of remedial alternatives and ARARs associated with particular actions. ARAR identification will continue as Site conditions, contaminants, and remedial action alternatives are better defined.

1.3. RI/FS Planning Documents (RI/FS Guidance Section 2.3)

Within 60 calendar days of U.S. EPA's comments or approval of the Preliminary Remedial Action Objectives Technical Memorandum (Task 1.2.2), the Respondents shall submit draft RI/FS Planning Documents to U.S. EPA and Ohio EPA that address all data acquisition activities. The draft RI/FS Planning Documents shall include the draft RI/FS Work Plan (Task 1.3.1), a draft Sampling and Analysis Plan consisting of a draft Field Sampling Plan and a draft Quality Assurance Project Plan (Tasks 1.3.2, 1.3.2.1 and 1.3.2.2), and a draft Health and Safety Plan (Task 1.3.3). U.S. EPA will review and approve the RI/FS Planning Documents in consultation with Ohio EPA prior to the initiation of field activities. Following comment by U.S. EPA, the Respondents shall prepare final RI/FS Planning Documents which fully and satisfactorily address each of U.S. EPA's comments on the draft RI/FS Planning Documents. The final RI/FS Planning Documents shall include a response to comments explaining how each of U.S. EPA's comments on the draft RI/FS Planning Documents was addressed in the final RI/FS Planning Documents. The Respondents shall submit the final RI/FS Planning Documents to U.S. EPA and Ohio EPA within 21 calendar days of the receipt of U.S. EPA's comments on the draft RI/FS Planning Documents. The Respondents shall submit any subsequent revisions to any of the RI/FS Planning Documents, if required, to U.S. EPA and Ohio EPA within 15 calendar days of the receipt of U.S. EPA's comments on the final RI/FS Planning Documents. The Respondents shall not make any changes to the RI/FS Planning Documents that are not a direct result of addressing agency comments. The Respondents shall identify all revisions to the RI/FS Planning Documents in the response to comments.

Because of the unknown nature of the Site and the iterative nature of the RI/FS, additional data requirements and analyses may be identified throughout the process. The Respondents shall submit a technical memorandum documenting the need for additional data and identifying the DQOs whenever such requirements are identified. U.S. EPA may also require that the Respondents submit amendments to the RI/FS Work Plan and/or any of the other RI/FS Planning Documents to address additional data collection activities. In any event, the Respondents are responsible for fulfilling the additional data and analysis needs identified by U.S. EPA consistent with the general scope and objectives of this RI/FS.

1.3.1 *RI/FS Work Plan* (RI/FS Guidance Section 2.3.1 and Appendix B)

The Respondents shall submit a RI/FS Work Plan that documents the Site background, data evaluations and project planning completed during the scoping process (see Tasks 1.1 and 1.2). The Work Plan shall include a summary of the information collected during Task 1.1, including, but not limited to: Site location; description; physiography; hydrology; geology; demographics; ecological, cultural and natural resource features; a summary of the Site history; and a description of previous investigations and responses conducted at the Site by local, state, federal, or private parties. The Site background section shall discuss areas of waste handling and disposal activities based on U.S. EPA's 2002 air photo analysis of the Site, and overlay these areas on an air photo showing current Site conditions, the 40-acre property line for the property owned by Margaret Grillot and/or Katheryn Boesch including leased areas, the locations of existing groundwater monitoring wells, and previous surface water, sediment, and soil sampling locations. The Work Plan shall include a summary description of available data and identify areas where hazardous substances or contaminants were detected and the detected levels. This includes the data in the 1991 Screening Site Inspection Report, the 1995 Focused Site Inspection Prioritization, the 1996 Site Team Evaluation Prioritization Report and information submitted to the U.S. EPA by the landfill owners. The RI/FS Work Plan shall include tables displaying the minimum and maximum levels of detected hazardous substances or contaminants in Site areas and media.

The RI/FS Work Plan shall include the preliminary objectives for the remedial action at the Site; preliminary potential state and federal ARARs (chemical-specific, location-specific and action-specific); a description of the Site management strategy developed by the Respondents and U.S. EPA during scoping; a preliminary identification of remedial alternatives; and data needs for fully characterizing the nature and extent of the contamination at the site, evaluating risks and developing and evaluating remedial alternatives. The RI/FS Work Plan shall reflect coordination with treatability study requirements, if any (see Task 1.2.1.8 and Task 5). It shall also include a process for and manner of refining and/or identifying additional Federal and State ARARs, and for preparing the human health and ecological risk assessments and the feasibility study.

The RI/FS Work Plan shall include a detailed description of the tasks the Respondents shall perform, the information needed for each task, a detailed description of the information the Respondents shall produce during and at the conclusion of each task, and a description of the work products that the Respondents shall submit to U.S. EPA and Ohio EPA. This includes the deliverables set forth in this SOW; a schedule for each of the required activities consistent with the RI/FS Guidance and other relevant guidance; and a project management plan including a data management plan (e.g., requirements for

project management systems and software, minimum data requirements, data format and backup data management), monthly reports to U.S. EPA and Ohio EPA, and meetings and presentations to U.S. EPA and Ohio EPA at the conclusion of each major phase of the RI/FS. The Respondents shall refer to Appendix B of the RI/FS Guidance for a comprehensive description of the required contents of the RI/FS Work Plan.

1.3.2 *Sampling and Analysis Plan* (RI/FS Guidance Section 2.3.2)

The Respondents shall prepare a Sampling and Analysis Plan (SAP) to ensure that sample collection and analytical activities are conducted in accordance with technically acceptable protocols and that the data meet the Site-specific DQOs. The SAP provides a mechanism for planning field activities and consists of a Field Sampling Plan (FSP) (Task 1.3.2.1) and a Quality Assurance Project Plan (QAPP) (Task 1.3.2.2). The FSP and the QAPP may be submitted as separate documents.

All sampling and analyses performed shall conform to U.S. EPA direction, approval, and guidance regarding sampling, quality assurance/quality control (QA/QC), data validation, and chain of custody procedures. The Respondents shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with U.S. EPA guidance.

Upon request by U.S. EPA, the Respondents shall have such a laboratory analyze samples submitted by U.S. EPA for quality assurance monitoring. The Respondents shall provide U.S. EPA the QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis. The Respondents shall also ensure the provision of analytical tracking information consistent with OSWER Directive No. 9240.0-2B, *Extending the Tracking of Analytical Services to PRP-Lead Superfund Sites*.

Upon request by U.S. EPA, the Respondents shall allow U.S. EPA or its authorized representatives to take split and/or duplicate samples of any samples collected by the Respondents or their contractors or agents. The Respondents shall notify U.S. EPA not less than 15 business days in advance of any sample collection activity. U.S. EPA shall have the right to take any additional samples that it deems necessary.

1.3.2.1 Field Sampling Plan (RI/FS Guidance Section 2.3.2.3 and Appendix B)

For each investigation and data collection activity identified in Task 1.2.1 *(Identify Data Needs and Design a Data Collection Program)* and any additional data collection activities identified in Task 1.2 (*Project*

Planning), the RI/FS Work Plan or during the course of the RI/FS, the Respondents shall submit a FSP that defines in detail the sampling and data-gathering methods that the Respondents shall use to collect the data. The FSP shall discuss how the specific tasks the Respondents shall perform shall meet the detailed Site-specific objectives of the RI/FS; the detailed objectives of each investigation (e.g., Tasks 1.2.1.1 to 1.2.1.8); and the DQOs.

For each investigation (e.g., waste characterization, etc.), the FSP shall present a statement of the problems and the potential problems posed by the Site; discuss previous sampling locations, analytical results and other relevant information (e.g., visual observations, historical records, air photo analyses); discuss the detailed objectives of each investigation, including the DQOs; and discuss and explain in detail how the specific work and activities the Respondents shall perform as part of each investigation will meet the objectives of the investigation and be used in the remedial investigation, the human health and ecological risk assessments and the feasibility study.

For each investigation, the FSP shall include a detailed description of the sampling objectives; sample locations, depths and frequency; sampling equipment and procedures; field measurements, analyses and procedures; sample preservation and handling; the field notes that the Respondents shall collect; field quality assurance; planned analyses; standard operating procedures; and decontamination procedures. The FSP shall include step-by-step instructions and be written so that a field sampling team unfamiliar with the Site would be able to gather the samples and the required field information according to the approved protocols. The FSP shall explain and justify why specific equipment and sampling procedures were selected and how they are appropriate for the work being performed and the objectives of this investigation. The FSP shall also include one or more figures that show all previous sampling locations with notes for any significant findings including groundwater elevation contours and the planned RI sample locations on the same map. The FSP shall also include a schedule which identifies the timing for the initiation and completion of all tasks the Respondents shall complete as a part of the FSP. If the Respondents plan to collect data from existing monitoring wells, they must collect additional data and/or demonstrate to U.S. EPA's satisfaction that the wells are appropriately located and screened to meet the sampling objectives (e.g., most existing wells are screened 5 to 10 or more feet below the water table).

1.3.2.2 Quality Assurance Project Plan (QAPP)

The Respondents shall prepare a Site-specific QAPP covering sample analysis and data handling for the samples and data collected during the RI. The Respondents shall prepare the QAPP in accordance with the *Region 5 Instructions on the Preparation of a Superfund Division Quality Assurance Project Plan Based on EPA QA/R-5* (Revision 0, June 2000); *EPA Requirements for Quality Assurance Project Plans (QA/R-5)* (EPA/240/B-01/003, March 2001); and *EPA Guidance for Quality Assurance Project Plans (QA/G-5)* (EPA/600/R-98/018, February 1998). The QAPP shall describe the project objectives and organization, functional activities, and quality assurance and quality control (QA/QC) protocols the Respondents shall use to achieve the desired DQOs. The DQOs shall at a minimum reflect use of analytic methods to identify contamination and remediate contamination consistent with the levels for remedial action objectives identified in the National Contingency Plan, 40 C.F.R. Part 300. In addition, the QAPP shall address sampling procedures, sample custody, analytical procedures, and data reduction, validation, reporting and personnel qualifications. The Respondents shall also ensure the provision of analytical tracking information consistent with U.S. EPA's Office of Solid Waste and Emergency Response (OSWER) Directive No. 9240.0-2B *Extending the Tracking of Analytical Services to PRP-Lead Superfund Sites*. Field personnel shall be available for U.S. EPA QA/QC training and orientation where applicable.

The Respondents shall demonstrate, in advance, to U.S. EPA's satisfaction, that each laboratory they may use is qualified to conduct the proposed work. This includes the use of methods and analytical protocols for the chemicals of concern in the media of interest within detection and quantification limits consistent with both QA/QC procedures and the DQOs in the U.S. EPA-approved QAPP for the Site. The laboratory must have and must follow an approved QA program.

If the Respondents select a laboratory that is not in the Contract Laboratory Program (CLP), the laboratory must use methods consistent with the CLP methods that would be used at this Site for the purposes proposed and the QA/QC procedures approved by U.S. EPA. Each laboratory and contractor who performs work involving environmental data operation activities for the Respondents under this AOC shall submit a Quality Management Plan (QMP) to U.S. EPA and Ohio EPA for review and to U.S. EPA for approval. The contractors' QMPs shall provide information on how the contractor's management will plan, implement, and assess its Quality System that complies with ANSI/ASQC E4-1994, *Specifications and Guidelines for Quality Systems for Environmental*

Data Collection and Environmental Technology Programs. The Respondents shall prepare the QMPs according to *EPA Requirements for Quality Management Plans*, EPA QA/R-2, March 2001, or equivalent documentation. The Respondents may submit the QMPs as part of the QAPP or as separate documents. U.S. EPA may also require the Respondents to submit detailed information to demonstrate that a laboratory is qualified to conduct the work, including information on personnel qualifications, equipment and material specifications. The Respondents shall provide assurances that U.S. EPA and Ohio EPA have access to laboratory personnel, equipment and records for sample collection, transportation and analysis. Upon request by U.S. EPA, the Respondents shall allow U.S. EPA or its authorized representatives to take split and/or duplicate samples of any samples collected by Respondents or their contractors or agents.

The Respondents shall participate in a pre-QAPP meeting or conference call with U.S. EPA. The purpose of this meeting or conference call is to discuss the QAPP requirements and to obtain any clarification needed to prepare the QAPP.

1.3.3 *Health and Safety Plan* (RI/FS Guidance Section 2.3.3 and Appendix B)

The Respondents shall prepare a Health and Safety Plan that conforms to their health and safety program and complies with the Occupational Safety and Health Administration (OSHA) regulations and protocols outlined in Title 29 of the Code of Federal Regulations (CFR), Part 1910. The Health and Safety Plan shall include the 11 elements described in the RI/FS Guidance such as a health and safety risk analysis, a description of monitoring and personal protective equipment, medical monitoring, and Site control. U.S. EPA does not "approve" the Respondent's Health and Safety Plan, but rather U.S. EPA reviews it to ensure that all the necessary elements are included, and that the plan provides for the protection of human health and the environment, and after that review provides comments as may be necessary and appropriate. The safety plan must, at a minimum, follow the U.S. EPA's guidance document *Standard Operating Safety Guides* (Publication 9285.1-03, PB92-963414, June 1992).

TASK 2: COMMUNITY RELATIONS SUPPORT AND TECHNICAL ASSISTANCE PLAN

U.S. EPA has the responsibility of developing and implementing community relations activities for the Site. The critical community relations planning steps performed by U.S. EPA and Ohio EPA include conducting community interviews and developing a Community Relations Plan. Although implementing the Community Relations Plan is the responsibility of U.S. EPA, the Respondents may assist by providing information

regarding the Site's history; participating in public meetings; assisting in preparing fact sheets for distribution to the general public; or conducting other activities approved by U.S. EPA. All PRP-conducted community relations activities shall be planned and developed in coordination with U.S. EPA.

In addition to any assistance with community relations activities, the Respondents shall prepare a Technical Assistance Plan (TAP) that will provide and administer $50,000 for a qualified community representative to hire a Technical Advisor, independent from the Respondents, to help interpret and comment on the South Dayton Dump Site-related documents developed under this SOW. The TAP will exist throughout the entire RI/FS.

As part of the TAP, the Respondents shall propose methods or plans for applying for, awarding, and administering the funds; selecting the community representative consistent with 40 CFR 35.4155; documenting the community representative selection process; and negotiating a contract with the selected community representative and the independent Technical Advisor. The Respondents shall accept the community representative's selection of an independent Technical Advisor provided the selection is documented and is consistent with 40 CFR 35.4190 and 35.4195. The Respondents may choose to hire a third party to coordinate and administer the TAP, including explaining information about the TAP application process.

The Respondents shall specify, in the TAP or in the contract, those activities that can and cannot be undertaken with the Respondents' funds. These eligible and ineligible activities shall be consistent with 40 CFR 35.4070 and 40 CFR 35.4075, respectively. In addition, the TAP-funded activities shall address only South Dayton Dump Site technical issues.

The Respondents shall submit the draft TAP to U.S. EPA and Ohio EPA within 30 calendar days after the effective date of the AOC. Following comment by U.S. EPA, the Respondents shall prepare a final TAP which fully and satisfactorily addresses each of U.S. EPA's comments on the draft TAP. The final TAP shall include a response to comments explaining how each of U.S. EPA's comments on the draft TAP was addressed in the final TAP. The Respondents shall submit the final TAP to U.S. EPA and Ohio EPA within 21 calendar days of the receipt of U.S. EPA's comments on the draft TAP. The Respondents shall submit any subsequent revisions to the TAP, if required, to U.S. EPA and Ohio EPA within 15 calendar days of the receipt of U.S. EPA's comments on the final TAP. The Respondents shall not make any changes to the TAP that are not a direct result of addressing agency comments. The Respondents shall identify all revisions to the TAP in the response to comments.

Within 30 calendar days of U.S. EPA's approval of the TAP, the Respondents shall select the TAP recipient; release $5,000 in start-up funds; confirm the selection of the Technical Advisor, and finalize an appropriate contract with the selected community representative and the Technical Advisor. In addition, the Respondents shall provide

U.S. EPA and Ohio EPA with quarterly progress reports concerning the implementation of the TAP.

TASK 3: SITE CHARACTERIZATION AND RISK ASSESSMENT (RI/FS Guidance Chapter 3)

This task includes conducting site characterization and investigation activities (Task 3.1); the baseline human health risk assessment (Task 3.2) and the baseline ecological risk assessment (Task 3.3).

3.1 Site Characterization

The Respondents shall conduct the site characterization activities according to the U.S. EPA-approved RI/FS Work Plan, FSP and QAPP, and shall include the investigations and data collection activities identified in Task 1.2.1 *(Identify Data Needs and Design a Data Collection Program)*, Task 1.2 (*Project Planning*); the RI/FS Work Plan; or during the course of the RI/FS. The Respondents shall document all field work and observations in detailed field logs and/or standard format information sheets (see Section 3.5.1 of the RI/FS Guidance for examples of the types of information that the Respondents must record). The Respondents must specify, in the RI Work Plan, the FSP and/or the QAPP, along with a description of the Respondents' sample management and tracking procedures, the methods of documentation and the types of information that the Respondents shall record. The Respondents shall coordinate field activities with U.S. EPA's Remedial Project Manager (RPM) at least 15 business days prior to any field mobilization and throughout the field activities.

The Respondents shall communicate the progress of the field activities to the RPM in the monthly progress reports (Task 8). The monthly progress reports shall summarize the field activities conducted each month including, but not limited to, drilling and sample locations, depths and descriptions; boring logs; sample collection logs; field notes; problems encountered; solutions to problems; a description of any modifications to the procedures outlined in the RI/FS Work Plan, the FSP, the QAPP or the Health and Safety Plan with justifications for the modifications; a summary of all data received during the reporting period and the analytical results; and upcoming field activities. In addition, the Respondents shall provide the RPM or the entity designated by the RPM with all laboratory data within the monthly progress reports and in no event later than 60 days after samples are shipped for analysis.

Within 120 calendar days following U.S. EPA's approval of the RI/FS Work Plan, the FSP and QAPP (Tasks 1.3.1, 1.3.2.1 and 1.3.2.2), the Respondents shall submit a Site Characterization Technical Memorandum that addresses all of the Site and nearby areas. The Site Characterization Technical Memorandum shall be consistent with the AOC and this SOW. The Respondents shall address U.S. EPA's comments on the Site Characterization Technical Memorandum when the Respondents prepare the RI Report

(Task 4). The Respondents shall complete a Site Characterization Technical Memorandum that addresses, but is not limited to, the elements listed below.

1. Introduction
    - Purpose of Report
    - Site Description and Background
        - Site Location and Physical Setting Including General Geology, Hydrology, Hydrogeology, Surrounding Land Use and Populations, Groundwater Use, Surface Water Bodies, Ecological Areas including Sensitive Ecosystems and Meteorology/Climatology
        - Past and Present Facility Operations/Site Usage and Disposal Practices, Including Waste Disposal/Operations Areas Based on Historical Air Photos
        - Previous Investigations and Results
    - Report Organization

2. Study Area Investigations, Procedures and Methodologies, Including a Detailed Description of All Field Activities Associated with Site Characterization and Any Deviations from Approved Planning Documents (i.e., Describe How the RI Was Conducted)
    - Detailed Sampling and Data Gathering Objectives; Data Gaps and Data Needs Identified During Project Scoping and Course of RI
    - Surface Features Inventory, Including Topographic Mapping, etc.
    - Surrounding Land Use and Population Inventories/Surveys
    - Meteorology/Climate Data Collection
    - Waste Characterization Activities
    - Surface and Subsurface Soils Investigations
    - Leachate Investigations
    - Hydrogeologic Investigations and Groundwater Use Inventories
    - Surface Water, Sediment and Floodplain Investigations
    - Landfill/Soil Gas and Air Investigations
    - Ecological Investigations
    - Treatability Studies

3. Physical Characteristics of the Study Area, Analytical Results and Modeling
    - Surface Features (Natural and Manmade) and Topography
    - Surrounding Land Use and Populations
    - Meteorology/Climate
    - Geology, Contaminant Source Areas, Waste Characterizations, Surface and Subsurface Soils, Hot Spots, Leachate, Analytical Data
    - Hydrogeology, Groundwater Conditions, Analytical Data, Contaminant Trends

- Surface Water Hydrology and Surface Water, Sediment and Floodplain Characterizations, Analytical Data
- Landfill/Soil Gas and Air Characterization, Analytical Data
- Ecological Characterization and Sensitive Ecosystems

4. Summary of the Nature and Extent of Contamination, Contaminant Fate and Transport and Modeling Results
   - Contaminant Source/Waste Areas, ~~and~~ Surface and Subsurface Soil Contamination, Hot Spots and Leachate
     - Contaminant Concentrations; Quantity, Volume, Size and/or Magnitude of Contamination; Potential Routes of Migration; Physical and Chemical Attributes and Contaminant Persistence; Contaminant Fate and Transport Processes; Migration to Other Areas and Media; Modeling, Detected and Modeled Concentrations in Other Areas and Media
   - Groundwater Contaminants
     - Contaminant Concentrations; Quantity, Volume, Size and/or Magnitude of Contamination; Potential Routes of Migration; Physical and Chemical Attributes and Contaminant Persistence; Groundwater Use; Fate and Transport Processes; Migration to Other Areas and Media; Modeling; Detected and Modeled Concentrations in Other Areas and Media
   - Surface Water and Sediments
     - Contaminants and Concentrations; Quantity, Volume, Size and/or Magnitude of Contamination; Potential Routes of Migration; Physical and Chemical Attributes and Contaminant Persistence; Contaminant Fate and Transport Processes; Migration to Other Areas and Media; Modeling; Detected and Modeled Concentrations in Other Areas and Media
   - Landfill/Soil Gas and Air
     - Contaminants and Concentrations; Quantity, Volume, Size and/or Magnitude of Contamination; Potential Routes of Migration; Physical and Chemical Attributes and Contaminant Persistence; Contaminant Fate and Transport; Buildings/Land Use; Migration to Other Areas and Media; Modeling; Detected and Modeled Concentrations in Other Areas and Media

5. Summary and Conclusions
   - Summary
     - Nature and Extent of Contamination
     - Fate and Transport

- Conclusions
  - Data Limitations and Recommendations for Future Work

6. References

7. Tables and Figures
   (at least one set of figures shall be no larger than 11" x 17")

8. Appendices
   - Log Books
   - Soil Boring Logs
   - Test Pit/Trenching Logs
   - Landfill/Soil Gas Probe Construction Diagrams
   - Direct Soil Solute Sampling Construction Diagrams
   - Monitoring Well Construction Diagrams
   - Sample Collection Logs
   - Private and Public Well Records
   - Analytical Data and Data Validation Reports
   - Detailed Modeling Reports

3.2 Human Health Risk Assessment

The Respondents shall conduct a health risk assessment that focuses on current and potential future risks to persons coming into contact with Site-related hazardous substances or contaminants, as well as risks to nearby residential, recreational and industrial worker populations from exposure to hazardous substances or contaminants in groundwater, soils, sediments, surface water, air, and the ingestion of contaminated organisms in nearby impacted ecosystems. The human health risk assessment shall define central tendency and reasonable maximum estimates of exposure for current land use conditions and reasonable future land use conditions. The human health risk assessment shall use data from the Site and nearby areas to identify the contaminants of concern (COCs), provide an estimate of how and to what extent human receptors might be exposed to these COCs currently and in the future (e.g., based on fate and transport modeling and/or changes in land or groundwater use), and provide an assessment of the health effects associated with these COCs. The human health risk assessment shall project the potential risk of health problems occurring if no cleanup action is taken at the Site and/or nearby areas; identify areas and/or media where risks exceed a cancer risk or 1E-6 and/or a hazard index of 1; and establish preliminary remediation goals for the COCs (carcinogenic and non-carcinogenic).

The Respondents shall conduct the human health risk assessment in accordance with U.S. EPA guidance including, at a minimum: *Risk Assessment Guidance for Superfund (RAGS), Volume I - Human Health Evaluation Manual (Part A)*, Interim Final (EPA-540-1-89-002, OSWER Directive 9285.7-01A, December 1, 1989); and *Risk Assessment*

Guidance for Superfund (RAGS), Volume I - Human Health Evaluation Manual (Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments) Final (EPA 540-R-97-033, OSWER 9285.7-01D, December 2001). The Respondents shall present and submit the results of the human health risk assessment in a draft Human Health Risk Assessment Report sent to Ohio EPA and U.S. EPA for review with the draft RI Report (60 calender days after receipt of U.S. EPA's comments on the Site Characterization Technical Memorandum - see Task 4). The Human Health Risk Assessment Report shall also include the information that U.S. EPA will need to prepare the relevant sections of the Record of Decision (ROD) for the Site [see Chapters 6 and 9 of U.S. EPA's *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Documents* (EPA 540-R-98-031, July 1999) for the information that is needed). The Human Health Risk Assessment Report may be submitted as a separate document from the RI Report, although the Respondents must summarize the results and the conclusions of the human health risk assessment in the RI Report. Following comment by U.S. EPA, the Respondents shall prepare a final Human Health Risk Assessment Report which fully and satisfactorily addresses each of U.S. EPA's comments on the draft Human Health Risk Assessment Report. The final Human Health Risk Assessment Report submittal shall include a response to comments explaining how each of U.S. EPA's comments on the draft Human Health Risk Assessment Report was addressed in the final Human Health Risk Assessment Report. The Respondents shall submit the final Human Health Risk Assessment Report to Ohio EPA for review and to U.S. EPA for review and approval within 21 calendar days of the receipt of U.S. EPA's comments on the draft Human Health Risk Assessment Report. The Respondents shall submit any subsequent revisions to the Human Health Risk Assessment Report, if any are required, to Ohio EPA for review and to U.S. EPA for review and approval within 15 calendar days of the receipt of U.S. EPA's comments on the final Human Health Risk Assessment Report. The Respondents shall not make any changes to the Human Health Risk Assessment Report that are not a direct result of addressing agency comments. The Respondents shall identify all revisions to the Human Health Risk Assessment Report in the response to comments.

3.3 Ecological Risk Assessment

The Respondents shall conduct an ecological risk assessment in accordance with U.S. EPA guidance including, at a minimum: *Ecological Risk Assessment Guidance for Superfund, Process for Designing and Conducting Ecological Risk Assessments* (EPA-540-R-97-006, June 1997, OSWER Directive 9285.7-25). The ecological risk assessment shall describe the data collection activities conducted as part of Task 1.2.1.7 and the information listed below. In addition, the ecological risk assessment shall evaluate both current and potential future risks to ecosystems (e.g., eventual groundwater transport to the Great Miami River and other ecosystems). The Respondents shall present the results of the ecological risk assessment in a draft Ecological Risk Assessment Report and submit the results with the draft RI Report (60

calendar days after receipt of U.S. EPA's comments on the Site Characterization Technical Memorandum - see Task 4). The Ecological Risk Assessment Report shall also include the information that U.S. EPA will need to prepare the relevant sections of the Record of Decision (ROD) for the Site [see Chapters 6 and 9 of U.S. EPA's *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Documents* (EPA 540-R-98-031, July 1999) for the information that is needed]. The Ecological Risk Assessment Report may be submitted as a separate document from the RI Report, although the results and the conclusions of the ecological risk assessment shall be summarized in the RI Report. Following comment by U.S. EPA, the Respondents shall prepare a final Ecological Risk Assessment Report which fully and satisfactorily addresses each of U.S. EPA's comments on the draft Ecological Risk Assessment Report. The final Ecological Risk Assessment Report submittal shall include a response to comments explaining how each of U.S. EPA's comments on the draft Ecological Risk Assessment Report was addressed in the final Ecological Risk Assessment Report. The Respondents shall submit the final Ecological Risk Assessment Report to Ohio EPA for review and to U.S. EPA for review and approval within 21 calendar days of the receipt of U.S. EPA's comments on the draft Ecological Risk Assessment Report. The Respondents shall submit any subsequent revisions to the Ecological Risk Assessment Report, if any are required, to Ohio EPA for review and to U.S. EPA for review and approval within 15 calendar days of the receipt of U.S. EPA's comments on the final Ecological Risk Assessment Report. The Respondents shall not make any changes to the Ecological Risk Assessment Report that are not a direct result of addressing agency comments. All revisions to the Ecological Risk Assessment Report shall be identified in the response to comments. The Respondents shall submit draft and final Ecological Risk Assessment Reports that fully address, but are not limited to, the following elements:

- Project Scoping, Planning and Study Objectives
- Conceptual Model and Assessment Endpoints
- Chemicals of Concern, Sources of Data and the Analytical Procedures Used
- Stressor-Response and Exposure Profiles
- Risks to Assessment Endpoints, Including Risk Estimates and Adversity Evaluations
- Review and Summary of Major Areas of Uncertainty (As Well As the Direction) and the Approaches Used to Address Them
    - Degree of Scientific Consensus In Key Areas of Certainty
    - Major Data Gaps and Whether Gathering Additional Data Would Add Significantly to Overall Confidence in Assessment Results
    - Science Policy Judgements or Default Assumptions Used to Bridge Information Gaps and the Basis for these Assumptions
    - Elements of Quantitative Uncertainty Analysis Embedded in Risk Estimate

TASK 4: REMEDIAL INVESTIGATION (RI) REPORT

Within 60 calendar days following receipt of U.S. EPA's comments on the Site Characterization Technical Memorandum (Task 3.1), the Respondents shall submit a draft RI Report that addresses all of the Site and nearby areas. The RI Report shall either include or summarize the Human Health Risk Assessment Report and the Ecological Risk Assessment Report, and shall be consistent with the AOC and this SOW. The RI Report shall fully and satisfactorily address and incorporate U.S. EPA's comments on the Site Characterization Technical Memorandum. The RI Report submittal shall include a response to comments that details how each of U.S. EPA's comments on the Site Characterization Technical Memorandum was addressed in the RI Report. The Respondents shall submit a RI Report that addresses, but is not limited to, the elements listed below. In addition, the RI Report shall also include the information that U.S. EPA will need to prepare the Record of Decision (ROD) for the Site [see Chapters 6 and 9 of U.S. EPA's *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Documents* (EPA 540-R-98-031, July 1999) for the information that is needed]. Following comment by U.S. EPA, the Respondents shall prepare a final RI Report which fully and satisfactorily addresses each of U.S. EPA's comments on the draft RI Report. The final RI Report submittal shall include a response to comments explaining how each of U.S. EPA's comments on the draft RI Report was addressed in the final RI Report. The Respondents shall submit the final RI Report to Ohio EPA for review and to U.S. EPA for review and approval within 21 calendar days of the receipt of U.S. EPA's comments on the draft RI Report. The Respondents shall submit any subsequent revisions to the RI Report, if any are required, to Ohio EPA for review and to U.S. EPA for review and approval within 15 calendar days of the receipt of U.S. EPA's comments on the final RI Report. The Respondents shall not make any changes to the RI Report that are not a direct result of addressing agency comments. The Respondents shall identify all revisions to the RI Report in the response to comments. The draft and final RI Reports shall fully address, but are not limited to, the following elements:

1. Executive Summary

2. Introduction
   - Purpose of Report
   - Site Description and Background
     - Site Location and Physical Setting Including General Geology, Hydrology, Hydrogeology, Surrounding Land Use and Populations, Groundwater Use, Surface Water Bodies, Ecological Areas including Sensitive Ecosystems and Meteorology/Climatology
     - Past and Present Facility Operations/Site Usage and Disposal Practices, Including Waste Disposal/Operations Areas Based on Historical Air Photos

- Previous Investigations and Results
- Report Organization

3. Study Area Investigations, Procedures and Methodologies, Including a Detailed Description of All Field Activities Associated with Site Characterization and Any Deviations from Approved Planning Documents (i.e., Describe How the RI Was Conducted)
   - Detailed Sampling and Data Gathering Objectives; Data Gaps and Data Needs Identified During Project Scoping and Course of RI
   - Surface Features Inventory, Including Topographic Mapping, etc.
   - Surrounding Land Use and Population Inventories/Surveys
   - Meteorology/Climate Data Collection
   - Waste Characterization Activities
   - Surface and Subsurface Soils Investigations
   - Leachate Investigation
   - Hydrogeologic Investigations and Groundwater Use Inventories
   - Surface Water, Sediment and Floodplain Investigations
   - Landfill/Soil Gas and Air Investigations
   - Ecological Investigations
   - Treatability Studies

4. Physical Characteristics of the Study Area, Analytical Results and Modeling
   - Surface Features (Natural and Manmade) and Topography
   - Surrounding Land Use and Populations
   - Meteorology/Climate
   - Geology, Contaminant Source Areas, Waste Characterizations, Surface and Subsurface Soils, Hot Spots, Leachate, Analytical Data
   - Hydrogeology, Groundwater Conditions, Analytical Data, Contaminant Trends
   - Surface Water Hydrology and Surface Water, Sediment and Floodplain Characterizations, Analytical Data
   - Landfill/Soil Gas and Air Characterization, Analytical Data
   - Ecological Characterization and Sensitive Ecosystems

5. Summary of the Nature and Extent of Contamination, Contaminant Fate and Transport and Modeling Results
   - Contaminant Source/Waste Areas, ~~and~~ Surface and Subsurface Soil Contamination, Hot Spots and Leachate
     - Contaminant Concentrations; Quantity, Volume, Size and/or Magnitude of Contamination; Potential Routes of Migration; Physical and Chemical Attributes and Contaminant Persistence; Contaminant Fate and

Transport Processes; Migration to Other Areas and Media; Modeling, Detected and Modeled Concentrations in Other Areas and Media

- Groundwater Contaminants
  - Contaminant Concentrations; Quantity, Volume, Size and/or Magnitude of Contamination; Potential Routes of Migration; Physical and Chemical Attributes and Contaminant Persistence; Groundwater Use; Fate and Transport Processes; Migration to Other Areas and Media; Modeling; Detected and Modeled Concentrations in Other Areas and Media
- Surface Water and Sediments
  - Contaminants and Concentrations; Quantity, Volume, Size and/or Magnitude of Contamination; Potential Routes of Migration; Physical and Chemical Attributes and Contaminant Persistence; Contaminant Fate and Transport Processes; Migration to Other Areas and Media; Modeling; Detected and Modeled Concentrations in Other Areas and Media
- Landfill/Soil Gas and Air
  - Contaminants and Concentrations; Quantity, Volume, Size and/or Magnitude of Contamination; Potential Routes of Migration; Physical and Chemical Attributes and Contaminant Persistence; Contaminant Fate and Transport; Buildings/Land Use; Migration to Other Areas and Media; Modeling; Detected and Modeled Concentrations in Other Areas and Media

6. Human Health Risk Assessment Summary

7. Ecological Risk Assessment Summary

8. Summary and Conclusions
   - Summary
     - Nature and Extent of Contamination
     - Fate and Transport
     - Risk Assessment
   - Conclusions
     - Data Limitations and Recommendations for Future Work
     - Recommended Remedial Action Objectives

9. References

10. Tables and Figures
    (at least one set of figures shall be no larger than 11" x 17")

11. Appendices
    - Log Books
    - Soil Boring Logs
    - Test Pit/Trenching Logs
    - Landfill/Soil Gas Probe Construction Diagrams
    - Direct Soil Solute Sampling Construction Diagrams
    - Monitoring Well Construction Diagrams
    - Sample Collection Logs
    - Private and Public Well Records
    - Analytical Data and Data Validation Reports
    - Detailed Modeling Reports

TASK 5: TREATABILITY STUDIES (RI/FS Guidance Chapter 5)
Based on currently available information, it is not certain whether treatability studies will be required to assist in the detailed analysis of Site alternatives. If U.S. EPA or the Respondents determine that treatability testing is necessary, the Respondents shall conduct treatability studies as described in this Task 5 of this SOW. In addition, if applicable, the Respondents shall use the testing results and operating conditions in the detailed design of the selected remedial technology. The Respondents shall perform the following activities.

5.1 Determine Candidate Technologies and of the Need for Testing (RI/FS Guidance Sections 5.2 and 5.4)

The Respondents shall submit a Candidate Technologies and Testing Needs Technical Memorandum, subject to U.S. EPA and Ohio EPA review and U.S. EPA approval, that identifies candidate technologies for a treatability studies program. The Respondents shall submit the technical memorandum as early as project planning (Task 1) to avoid any potential delays in the FS. The list of candidate technologies shall cover the range of technologies required for alternatives analysis (Task 6.1). The Respondents shall determine and refine the specific data requirements for the testing program during Site characterization (Task 3) and the development and screening of remedial alternatives (Task 6).

5.1.1 *Conduct Literature Survey and Determine the Need for Treatability Testing* (RI/FS Guidance Section 5.2)

The Respondents shall conduct a literature survey to gather information on the performance, relative costs, applicability, removal efficiencies, operation and maintenance (O&M) requirements, and implementability of candidate technologies. If the Respondents have not sufficiently demonstrated practical

candidate technologies, or if such technologies cannot be adequately evaluated for this Site on the basis of the available information, the Respondents shall conduct treatability testing. If U.S. EPA determines that treatability testing is necessary, and the Respondents cannot demonstrate to U.S. EPA's satisfaction that such testing is unnecessary, then the Respondents shall submit a statement of work to U.S. EPA and Ohio EPA that outlines the steps and the data necessary to evaluate and initiate the treatability testing program.

5.1.2 *Evaluate Treatability Studies* (RI/FS Guidance Section 5.4)

Once a decision has been made to perform treatability studies, U.S. EPA will decide on the type of treatability testing to use (e.g., bench versus pilot). Because of the time required to design, fabricate, and install pilot scale equipment as well as perform testing for various operating conditions, the decision to perform pilot testing will be made as early in the process as possible to minimize potential delays of the FS. To assure that a treatability testing program is completed on time, and with accurate results, the Respondents shall either submit a separate Treatability Testing Work Plan and SAP, or amendments to the original RI/FS Work Plan, FSP, QAPP for U.S. EPA and Ohio EPA review and U.S. EPA approval.

5.2 Treatability Testing and Deliverables (RI/FS Guidance Sections 5.5, 5.6 and 5.8)

In addition to the Candidate Technologies and Testing Needs Technical Memorandum, if treatability testing is needed, the Respondents shall also submit a Treatability Study Work Plan, a Sampling and Analysis Plan, a Health and Safety Plan and a Treatability Evaluation Report.

5.2.1 *Treatability Testing Work Plan and Sampling and Analysis Plan* (SAP) (RI/FS Guidance Section 5.5)

The Respondents shall prepare a Treatability Testing Work Plan and a SAP, or amendments to the original RI/FS Work Plan, FSP and QAPP for U.S. EPA and Ohio EPA review and U.S. EPA approval that describes the Site background, the remedial technology(ies) to be tested, test objectives, experimental procedures, treatability conditions to be tested, measurements of performance, analytical methods, data management and analysis, health and safety, and residual waste management. The Respondents shall document the DQOs for treatability testing as well. If pilot scale treatability testing is to be performed, the Treatability Study Work Plan shall describe pilot plant installation and start-up, pilot plant operation and maintenance procedures, operating conditions to be tested, a sampling plan to determine pilot plant performance, and a detailed health and safety plan. If testing is to be performed off-Site, the plans shall address all permitting

requirements. The requirements of SAPs are outlined in Task 1.3.2 of this SOW.

5.2.2 *Treatability Study Health and Safety Plan* (RI/FS Guidance Section 5.5)

If the original Health and Safety Plan is not adequate for defining the activities to be performed during the treatability tests, the Respondents shall submit a separate or amended Health and Safety Plan. Task 1.3.3 of this SOW provides additional information on the requirements of the Health and Safety Plan. U.S. EPA and Ohio EPA review, but do not "approve" the Treatability Study Health and Safety Plan.

5.2.3 *Treatability Study Evaluation Report* (RI/FS Guidance Section 5.6)

Following the completion of the treatability testing, the Respondents shall analyze and interpret the testing results in a technical report to U.S. EPA and Ohio EPA. Depending on the sequence of activities, this report may be a part of the Site Characterization Technical Memorandum (Task 3.1), the RI Report (Task 4) or submitted as a separate deliverable. The Treatability Study Evaluation Report shall evaluate each technology's effectiveness, implementability and cost, and actual results as compared with predicted results. The report shall also evaluate full scale application of the technology, including a sensitivity analysis identifying the key parameters affecting full-scale operation.

TASK 6: DEVELOPMENT AND SCREENING OF ALTERNATIVES (Technical Memorandum)

The Respondents shall develop and screen remedial alternatives to determine an appropriate range of waste management options that the Respondents shall evaluate. This range of alternatives shall include, as appropriate, options in which treatment is used to reduce the toxicity, mobility, or volume of wastes, but which vary in the types of treatment, the amount treated, and the manner in which long-term residuals or untreated wastes are managed; options involving containment with little or no treatment; options involving both treatment and containment; and a no-action alternative. The Respondents shall perform the following activities as a function of the development and screening of remedial alternatives. Potential Remedial Alternatives may be screened and developed in accordance with *Conducting Remedial Investigations/Feasibility Studies for CERCLA Municipal Landfill Sites* (EPA/540/P-91/001, February 1991) and *Implementing Presumptive Remedies* (EPA 540-R-97-029, October 1997) (see sections for municipal landfills, contaminated groundwater and any other applicable sections). Presumptive remedies involve using remedial technologies that have been consistently selected at similar sites or for similar types of contamination. Using the presumptive remedy guidance provides an immediate focus to the identification and analysis of remedial alternatives.

6.1 Develop and Screen Remedial Alternatives (RI/FS Guidance Section 4.2)

The Respondents shall begin to develop and evaluate a range of appropriate waste management options that at a minimum ensure protection of human health and the environment and meet the remedial action objectives. The Respondents shall present and summarize the development and screening of the remedial alternatives in the Alternatives Screening Technical Memorandum (Task 6.2.2).

6.1.1 *Refine and Document Remedial Action Objectives* (RI/FS Guidance Section 4.2.1)

Based on the baseline human health and ecological risk assessments, the Respondents shall review and if necessary modify the Site-specific remedial action objectives, specifically the preliminary remedial action objectives established by U.S. EPA prior to or during negotiations between U.S. EPA and the Respondents. The preliminary remedial action objectives for the South Dayton Dump Site are listed in Task 1 of this SOW. The Respondents shall document the revised remedial action objectives in a Remedial Action Objectives Technical Memorandum (Task 6.2.1) for U.S. EPA and Ohio EPA review and for U.S. EPA approval. The modified remedial action objectives shall specify the constituents of concern and the media of interest; exposure pathways and receptors; and an acceptable contaminant level or range of levels (at particular locations for each exposure route).

6.1.2 *Develop General Response Actions* (RI/FS Guidance 4.2.2)

After U.S. EPA approves the modified remedial action objectives, the Respondents shall develop general response actions for each medium of interest including containment, treatment, excavation, pumping, or other actions, singly or in combination, to satisfy the U.S. EPA-approved remedial action objectives.

6.1.3 *Identify Areas or Volumes of Media* (RI/FS Guidance Section 4.2.3)

The Respondents shall identify areas or volumes of media to which the general response actions may apply, taking into account requirements for protectiveness as identified in the remedial action objectives. The Respondents shall also take into account the chemical and physical characterization of the Site.

6.1.4 *Identify, Screen, and Document Remedial Technologies* (RI/FS Guidance Sections 4.2.4 and 4.2.5)

The Respondents shall identify and evaluate technologies applicable to each general response action to eliminate those that cannot be implemented at the Site. The Respondents shall refine applicable general response actions to specify remedial technology types. The Respondents shall identify technology process options for each of the technology types concurrently with the identification of such technology types or following the screening of considered technology types. The Respondents shall evaluate process options on the basis of effectiveness, implementability, and cost factors to select and retain one or, if necessary, more representative processes for each technology type. The Respondents shall summarize and include the technology types and process options in the Alternatives Screening Technical Memorandum. Whenever practicable, the alternatives shall also consider the CERCLA preference for treatment over conventional containment or land disposal approaches.

The preliminary list of alternatives to address the landfill contents and contaminated soil, sediments, surface water, groundwater, and air contamination at the Site shall consist of, but is not limited to, treatment technologies, removal and off-site treatment/disposal, removal and on-site disposal, and in-place containment for soils, sediments, and wastes. See 40 CFR 300.430(e)(1)-(7). The Respondents shall specify the reasons for eliminating any alternatives.

6.1.5 *Assemble and Document Alternatives* (RI/FS Guidance Section 4.2.6)

The Respondents shall assemble the selected representative technologies into alternatives for each affected medium or operable unit. Together, all of the alternatives shall represent a range of treatment and containment combinations that shall address either the Site or the operable unit as a whole. The Respondents shall prepare a summary of the assembled alternatives and their related action-specific ARARs for the Alternatives Screening Technical Memorandum. The Respondents shall specify the reasons for eliminating alternatives during the preliminary screening process.

6.1.6 *Refine Alternatives*

The Respondents shall refine the remedial alternatives to identify the volumes of contaminated media addressed by the proposed processes and size critical unit operations as necessary. The Respondents shall collect sufficient information for an adequate comparison of alternatives. The Respondents shall also modify the remedial action objectives for each chemical in each medium as

necessary to incorporate any new human health and ecological risk assessment information presented in the Respondents' baseline human health and ecological risk assessment reports. Additionally, the Respondents shall update action-specific ARARs as the remedial alternatives are refined.

6.1.7 *Conduct and Document Screening Evaluation of Each Alternative* (RI/FS Guidance Section 4.3)

The Respondents may perform a final screening process based on short and long term aspects of effectiveness, implementability, and relative cost. Generally, this screening process is only necessary when there are many feasible alternatives available for a detailed analysis. If necessary, the Respondents shall conduct the screening of alternatives to assure that only the alternatives with the most favorable composite evaluation of all factors are retained for further analysis. As appropriate, the screening shall preserve the range of treatment and containment alternatives that was initially developed. The range of remaining alternatives shall include options that use treatment technologies and permanent solutions to the maximum extent practicable. The Respondents shall prepare an Alternatives Screening Technical Memorandum that summarizes the results and reasoning employed in screening; arrays the alternatives that remain after screening; and identifies the action-specific ARARs for the alternatives that remain after screening (Task 6.2.2).

6.2 Alternatives Development and Screening Deliverables (RI/FS Guidance Section 4.5)

The Respondents shall prepare and submit two technical memoranda for this task.

6.2.1 *Remedial Action Objectives Technical Memorandum* (see Task 6.1.1)

The Respondents shall submit a Remedial Action Objectives Technical Memorandum (see Task 6.1.1) to Ohio EPA and U.S. EPA for review. The Respondents shall submit the Remedial Action Objectives Technical Memorandum at the same time as the Draft RI Report (60 days after receipt of U.S. EPA's comments on the Site Characterization Technical Memorandum - see Task 4). The Respondents shall address and incorporate U.S. EPA's comments on the Remedial Action Objectives Technical Memorandum in the Alternatives Screening Technical Memorandum (Task 6.2.2).

6.2.2 Alternatives Screening Technical Memorandum (see Tasks 6.1.1 to 6.1.7)

The Respondents shall submit an Alternatives Screening Technical Memorandum to Ohio EPA and U.S. EPA for review. The Alternatives

Screening Technical Memorandum shall summarize the work performed during and the results of each of the above tasks (Task 6.1.1 to 6.1.7), and shall include an alternatives array summary. If required by U.S. EPA, the Respondents shall modify the alternatives array to assure that the array identifies a complete and appropriate range of viable alternatives to be considered in the detailed analysis. The Alternatives Screening Technical Memorandum shall document the methods, the rationale and the results of the alternatives screening process. The Respondents shall address and incorporate U.S. EPA's comments on the Alternatives Screening Technical Memorandum in the Comparative Analysis of Alternatives Technical Memorandum (Task 7.1.2). The Respondents shall submit the Alternatives Screening Technical Memorandum within 21 calendar days after receipt of U.S. EPA's comments on the Remedial Action Objectives Technical Memorandum.

TASK 7: DETAILED ANALYSIS of ALTERNATIVES (FS REPORT) (RI/FS Guidance Chapter 6)

The Respondents shall conduct and present a detailed analysis of remedial alternatives to provide U.S. EPA with the information needed to select a Site remedy.

7.1 Detailed Analysis of Alternatives (RI/FS Guidance Section 6.2)

The Respondents shall conduct a detailed analysis of the remedial alternatives for the Site. The detailed analysis shall include an analysis of each remedial option against a set of nine evaluation criteria, and a comparative analysis of all options using the same nine criteria as a basis for comparison.

7.1.1 *Apply Nine Criteria and Document Analysis* (RI/FS Guidance Sections 6.2.1 to 6.2.4)

The Respondents shall apply the nine evaluation criteria to the assembled remedial alternatives to ensure that the selected remedial alternative will protect human health and the environment and meet remedial action objectives; will comply with, or include a waiver of, ARARs; will be cost-effective; will utilize permanent solutions and alternative treatment technologies, or resource recovery technologies, to the maximum extent practicable; and will address the statutory preference for treatment as a principal element. The evaluation criteria include: (1) overall protection of human health and the environment and how the alternative meets each of the remedial action objectives; (2) compliance with ARARs; (3) long-term effectiveness and permanence; (4) reduction of toxicity, mobility, or volume; (5) short-term effectiveness; (6) implementability; (7) cost; (8) state (or support agency) acceptance; and (9) community acceptance. (Note: criteria 8 and 9 are considered after the RI/FS report has been released to the

general public.) For each alternative the Respondents shall provide: (1) A description of the alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative, and (2) A discussion of the individual criterion assessment. If the Respondents do not have direct input on criteria (8) state (or support agency) acceptance and (9) community acceptance, U.S. EPA will address these criteria.

7.1.2 *Compare Alternatives Against Each Other and Document the Comparison of Alternatives* (RI/FS Guidance Sections 6.2.5 and 6.2.6)

The Respondents shall perform a comparative analysis between the remedial alternatives. That is, the Respondents shall compare each alternative against the other alternatives using the evaluation criteria as a basis of comparison. U.S. EPA will identify and select the preferred alternative. The Respondents shall prepare a Comparative Analysis of Alternatives Technical Memorandum which summarizes the results of the comparative analysis and fully and satisfactorily addresses and incorporates U.S. EPA's comments on the Alternatives Screening Technical Memorandum (Task 6.2.2). The Comparative Analysis of Alternatives Technical Memorandum submittal shall include a response to comments explaining how each of U.S. EPA's comments on the Alternatives Screening Technical Memorandum was addressed in the Comparative Analysis of Alternatives Technical Memorandum. The Respondents shall address and incorporate U.S. EPA's comments on the Comparative Analysis of Alternatives Technical Memorandum in the draft FS Report (Task 7.2). The FS Report submittal shall include a response to comments explaining how each of U.S. EPA's comments on the Comparative Analysis of Alternatives Technical Memorandum was addressed in the FS Report. The Respondents shall submit the Comparative Analysis of Alternatives Memorandum within 21 calendar days after receipt of U.S. EPA's comments on the Alternatives Screening Technical Memorandum.

7.2 Feasibility Study Report (RI/FS Guidance Section 6.5)

Within 21 days after receipt of U.S. EPA's comments on the Comparative Analysis of Alternatives Technical Memorandum (Task 7.1.2) the Respondents shall prepare and submit a draft FS Report for U.S. EPA and Ohio EPA review. The FS Report shall be consistent with the AOC and this SOW and shall fully and satisfactorily address and incorporate U.S. EPA's comments on the Comparative Analysis of Alternatives Technical Memorandum. The FS Report submittal shall include a response to comments explaining how each of U.S. EPA's comments on the Comparative Analysis of Alternatives Technical Memorandum was addressed in the FS Report. The FS report shall summarize the development and screening of the remedial alternatives (Task 6) and present the detailed analysis of remedial alternatives (Task 7.1). In addition, the FS Report shall also include the information U.S. EPA will need to prepare relevant sections

of the Record of Decision (ROD) for the Site [see Chapters 6 and 9 of U.S. EPA's *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents* (EPA 540-R-98-031, July 1999) for the information that is needed]. Following comment by U.S. EPA, the Respondents shall prepare a final FS Report which fully and satisfactorily addresses each of U.S. EPA's comments on the draft FS Report. The final FS Report submittal shall include a response to comments detailing how each of U.S. EPA's comments on the draft FS Report was addressed in the final FS Report. The Respondents shall submit the final FS Report to Ohio EPA for review and to U.S. EPA for review and approval within 21 calendar days of the receipt of U.S. EPA's comments on the draft FS Report. The Respondents shall submit any subsequent revisions to the FS Report, if any are required, to Ohio EPA for review and to U.S. EPA for review and approval within 15 calendar days of the receipt of U.S. EPA's comments on the final FS Report. The Respondents shall not make any changes to the FS Report that are not a direct result of addressing agency comments. The Respondents shall identify all revisions to the FS Report in the response to comments.

The FS Report, as ultimately adopted or amended by U.S. EPA provides the basis for conducting a remedial action at the Site and documents the development and analysis of remedial alternatives. The Respondents shall refer to Section 6 of the RI/FS Guidance for an outline of the FS Report format and the required FS Report contents.

TASK 8: PROGRESS REPORTS

The Respondents shall submit monthly written progress reports to U.S. EPA and Ohio EPA concerning actions undertaken pursuant to the AOC and this SOW, beginning 30 calendar days after the effective date of the AOC, until the termination of the AOC, unless otherwise directed in writing by the RPM. These reports shall include, but not be limited to, a description of all significant developments during the preceding period, including the specific work that was performed and any problems that were encountered; a copy and summary of the analytical data that was received during the reporting period; and the developments anticipated during the next reporting period, including a schedule of work to be performed, anticipated problems, and actual or planned resolutions of past or anticipated problems. The monthly progress reports will summarize the field activities conducted each month including, but not limited to drilling and sample locations, depths and descriptions; boring logs; sample collection logs; field notes; problems encountered; solutions to problems; a description of any modifications to the procedures outlined in the RI/FS Work Plan, the FSP, QAPP or Health and Safety Plan, with justifications for the modifications; a summary of all data received during the reporting period and the analytical results; and upcoming field activities. In addition, the Respondents shall provide the RPM or the entity designated by the RPM with all laboratory data within the monthly progress reports and in no event later than 60 days after samples are shipped for analysis.

EXHIBIT A
SCHEDULE FOR MAJOR DELIVERABLES

DELIVERABLE	DUE DATE
TASK 1.2.2 - Preliminary Remedial Action Objectives Technical Memorandum	30 calendar days after the effective date of the AOC
TASK 1.3.1 - RI/FS Work Plan	Draft RI/FS Work Plan due 60 calendar days after receipt of U.S. EPA's comments on or approval of the Preliminary Remedial Action Objectives Technical Memorandum (Task 1.2.2). Final RI/FS Work Plan due 21 calendar days after receipt of U.S. EPA's comments on the draft RI/FS Work Plan. Any subsequent revisions, if required, are due within 15 calendar days of receipt of U.S. EPA's comments.
TASK 1.3.2.1 - Field Sampling Plan	Draft Field Sampling Plan due 60 calendar days after receipt of U.S. EPA's comments on or approval of the Preliminary Remedial Action Objectives Technical Memorandum (Task 1.2.2). Final Field Sampling Plan due 21 calendar days after receipt of U.S. EPA's comments on the draft Field Sampling Plan. Any subsequent revisions, if required, are due within 15 calendar days of receipt of U.S. EPA's comments.
TASK 1.3.2.2 - Quality Assurance Project Plan and Quality Management Plan(s)	Draft Quality Assurance Project Plan and Quality Management Plan(s) due 60 calendar days after receipt of U.S. EPA's comments on or approval of the Preliminary Remedial Action Objectives Technical Memorandum (Task 1.2.2). Final Quality Assurance Project Plan and Quality Management Plan(s) due 21 calendar days after receipt of U.S. EPA's comments on the draft Field Sampling Plan. Any subsequent revisions, if required, are due within 15 calendar days of receipt of U.S. EPA's comments.

DELIVERABLE	DUE DATE
TASK 1.3.3 - Health and Safety Plan	Draft Health and Safety Plan due 60 calendar days after receipt of U.S. EPA's comments on or approval of the Preliminary Remedial Action Objectives Technical Memorandum (Task 1.2.2). Final Health and Safety Plan due 21 calendar days after receipt of U.S. EPA's comments on the draft Health and Safety Plan. Any subsequent revisions, if required, are due within 15 calendar days of receipt of U.S. EPA's comments.
Task 2 - Technical Assistance Plan (TAP)	Draft TAP due 30 calendar days after the effective date of the AOC. Final TAP due 21 calendar days after receipt of U.S. EPA's comments on the draft TAP. Any subsequent revisions, if required, are due within 15 calendar days of receipt of U.S. EPA's comments.
Task 2 - Quarterly Progress Reports on Implementation of the TAP	10 calendar days after the end of each calendar year quarter; first report due in the first full calendar year quarter after the effective date of the AOC.
Task 3.1 - Site Characterization Technical Memorandum	120 calendar days after U.S. EPA's approval of the RI/FS Work Plan (Task 1.3.1), the FSP (Task 1.3.2) and QAPP (Task 1.3.3).
Task 3.2 - Human Health Risk Assessment Report	Draft Human Health Risk Assessment Report due 60 calendar days after receipt of U.S. EPA's comments on the Site Characterization Technical Memorandum (Task 3.1). Final Human Health Risk Assessment Report due 21 calendar days after receipt of U.S. EPA's comments on the draft Human Health Risk Assessment Report. Any subsequent revisions, if required, are due within 15 calendar days of receipt of U.S. EPA's comments.

DELIVERABLE	DUE DATE
Task 3.3 - Ecological Risk Assessment Report	Draft Ecological Risk Assessment Report due 60 calendar days after receipt of U.S. EPA's comments on the Site Characterization Technical Memorandum (Task 3.1). Final Ecological Risk Assessment Report due 21 calendar days after receipt of U.S. EPA's comments on the draft Ecological Risk Assessment Report. Any subsequent revisions, if required, are due within 15 calendar days of receipt of U.S. EPA's comments.
TASK 4 - RI Report	Draft RI Report due 60 calendar days after receipt of U.S. EPA's comments on the Site Characterization Technical Memorandum (Task 3.1). Final RI Report due 21 calendar days after receipt of U.S. EPA's comments on the draft RI Report. Any subsequent revisions, if required, are due within 15 calendar days of receipt of U.S. EPA's comments.
TASK 5.1 - Candidate Technologies and Testing Needs Technical Memorandum	During Task 1 - Project Planning or early enough in the RI/FS to avoid potential delays in the FS.
TASK 5.2.1 - Draft and Final Treatability Testing Work Plan and SAP or Amendments to the Original RI/FS Work Plan, FSP and/or QAPP.	As approved by U.S. EPA in the RI/FS Work Plan (Task 1.3.1).
TASK 5.2.2 - Draft and Final Treatability Testing Health and Safety Plan or Amendment to the Original Health and Safety Plan	As approved by U.S. EPA in the RI/FS Work Plan (Task 1.3.1).
TASK 5.2.3 - Draft and Final Treatability Study Evaluation Report	With the Site Characterization Technical Memorandum (Task 3.1), the RI Report (Task 4), or as approved by U.S. EPA in the RI/FS Work Plan (Task 1.3.1).

DELIVERABLE	DUE DATE
TASK 6.2.1 - Remedial Action Objectives Technical Memorandum	With the draft RI Report (Task 4) - 60 calendar days after receipt of U.S. EPA's comments on the Site Characterization Technical Memorandum (Task 3.1).
TASK 6.2.2 - *Alternatives Screening* Technical Memorandum	*21 calendar days after receipt of* U.S. EPA's comments on the Remedial Action Objectives Technical Memorandum (Task 6.2.1)
TASK 7.1.2 - Comparative Analysis of Alternatives Technical Memorandum	21 calendar days after receipt of U.S. EPA's comments on the Alternatives Screening Technical Memorandum (Task 6.2.2).
Task 7.2 - FS Report	Draft FS Report due 21 calendar days after receipt of U.S. EPA's comments on the Comparative Analysis of Alternatives Technical Memorandum (Task 7.1.2). Final RI Report due 21 calendar days after receipt of U.S. EPA's comments on the draft FS Report. Any subsequent revisions, if required, are due within 15 calendar days of receipt of U.S. EPA's comments.
TASK 8: Monthly Progress Reports	On the 15th day of each month or the first business day after the 15th of the month commencing 30 calendar days after the effective date of the AOC.
Miscellaneous Documents	In accordance with the submittal date provided by RPM

EXHIBIT B
PARTIAL LIST OF GUIDANCE

The following list, although not comprehensive, comprises many of the regulations and guidance documents that apply to the RI/FS process. The majority of these guidance documents, and additional applicable guidance documents, may be downloaded from the following websites:

http://www.epa.gov/superfund/pubs.htm (General Superfund)
http://cluin.org (Site Characterization, Monitoring and Remediation)
http://www.epa.gov/ORD/NRMRL/Pubs (Site Characterization and Monitoring)
http://www.epa.gov/quality/qa_docs.html#guidance (Quality Assurance)
http://www.epa.gov/superfund/programs/risk/toolthh.htm (Risk Assessment - Human)
http://www.epa.gov/superfund/programs/risk/tooleco.htm (Ecological Risk Assessment)
http://www.epa.gov/superfund/programs/lead (Risk Assessment - Lead)
http://cfpub.epa.gov/ncea (Risk Assessment - Exposure Factors/Other)
http://www.epa.gov/nepis/srch.htm (General Publications Clearinghouse)
http://www.epa.gov/clariton/clhtml/pubtitle.html (General Publications Clearinghouse)

1. The (revised) National Contingency Plan;

2. *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA*, U.S. EPA, Office of Emergency and Remedial Response, OSWER Directive No. 9355.3-01, EPA/540/G-89/004, October 1988.

3. *Conducting Remedial Investigations/Feasibility Studies for CERCLA Municipal Landfill Sites*, U.S. EPA, Office of Emergency and Remedial Response, EPA/540/P-91/001, February 1991.

4. *Implementing Presumptive Remedies*, U.S. EPA, Office of Emergency and Remedial Response, EPA-540-R-97-029, October 1997.

5. *Presumptive Remedy for CERCLA Municipal Landfill Sites*, U.S. EPA, OSWER Directive No. 9355.0-49FS, EPA-540-F-93-035, September 1993.

6. *Presumptive Remedies: CERCLA Landfill Caps RI/FS Data Collection Guide*, U.S. EPA, OSWER 9355.3-18FS, EPA/540/F-95/009, August 1995.

7. *Presumptive Response Strategy and Ex-Situ Treatment Technologies for Contaminated Ground Water at CERCLA Sites*, OSWER 9283.1-12, EPA-540-R-96-023, October 1996.

8. *Field Analytical and Site Characterization Technologies Summary of Applications*, U.S. EPA, EPA-542-F-97-024, November 1997.

9. *CLU-IN Hazardous Waste Clean-Up Information World Wide Web Site*, U.S. EPA, EPA-542-F-99-002, February 1999.

10. *Field Sampling and Analysis Technology Matrix and Reference Guide*, U.S. EPA, EPA-542-F-98-013, July 1998.

11. *Subsurface Characterization and Monitoring Techniques: A Desk Reference Guide, Volumes 1 and 2*, U.S. EPA, EPA/625/R-93/003, May 1993.

12. *Use of Airborne, Surface, and Borehole Geophysical Techniques at Contaminated Sites: A Reference Guide*, U.S. EPA, EPA/625/R-92/007(a,b), September 1993.

13. *Innovations in Site Characterization: Geophysical Investigation at Hazardous Waste Sites*, U.S. EPA, EPA-542-R-00-003, August 2000.

14. *Innovative Remediation and Site Characterization Technology Resources*, U.S. EPA, OSWER, EPA-542-F-01-026b, January 2001.

15. *Handbook of Suggested Practices for the Design and Installation of Ground-Water Monitoring Wells*, U.S. EPA, EPA/600/4-89/034, 1991.

16. *Ground-Water Sampling Guidelines for Superfund and RCRA Project Managers*, U.S. EPA, EPA-542-S-02-001, May 2002.

17. *Ground Water Issue: Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures*, U.S. EPA, EPA/540/S-95/504, April 1996.

18. *Superfund Ground Water Issue: Ground Water Sampling for Metals Analysis*, U.S. EPA, EPA/540/4-89/001, March 1989.

19. *Resources for Strategic Site Investigation and Monitoring*, U.S. EPA, OSWER, EPA-542-F-010030b, September 2001.

20. *Region 5 Framework for Monitored Natural Attenuation Decisions for Groundwater*, U.S. EPA Region 5, September 2000.

21. *Ground Water Issue: Suggested Operating Procedures for Aquifer Pumping Tests*, U.S. EPA, OSWER, EPA/540/S-93/503, February 1993.

22. *Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water*, U.S. EPA, EPA/600/R-98/128, September 1998.

23. *Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action and Underground Storage Tank Sites*, U.S. EPA, OSWER Directive 9200.4-17P, April 21, 1999.

24. *Ground Water Issue: Fundamentals of Ground-Water Modeling*, U.S. EPA, OSWER, EPA/540/S-92/005, April 1992.

25. *Assessment Framework for Ground-Water Model Applications*, U.S. EPA, OSWER Directive #9029.00, EPA-500-B-94-003, July 1994.

26. *Ground-Water Modeling Compendium - Second Edition: Model Fact Sheets, Descriptions, Applications and Cost Guidelines*, U.S. EPA, EPA-500-B-94-004, July 1994.

27. *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents*, U.S. EPA, Office of Solid Waste and Emergency Response, OSWER Directive No. 9200.1-23P, EPA 540-R-98-031, July 1999.

28. *Region 5 Instructions on the Preparation of A Superfund Division Quality Assurance Project Plan Based on EPA QA/R-5, Revision 0*, U.S. EPA Region 5, June 2000.

29. *Guidance for the Data Quality Objectives Process (QA-G-4)*, U.S. EPA, EPA/600/R-96/055, August 2000.

30. *Guidance for the Data Quality Objectives Process for Hazardous Waste Sites (QA/G-4HW)*, U.S. EPA, EPA/600/R-00/007, January 2000.

31. *Guidance for the Preparation of Standard Operating Procedures (QA-G-6)*, U.S. EPA, EPA/240/B-01/004, March 2001.

32. *EPA Requirements for Quality Management Plans (QA/R-2)*, U.S. EPA, EPA/240/B-01/002, March 2001.

33. *EPA Requirements for QA Project Plans (QA/R-5)*, U.S. EPA, EPA/240/B-01/003, March 2001.

34. *Guidance for Quality Assurance Project Plans (QA/G-5)*, U.S. EPA, EPA/600/R-98/018, February 1998.

35. *Users Guide to the EPA Contract Laboratory Program*, U.S. EPA, Sample Management Office, OSWER Directive No. 9240.0-01D, January 1991.

36. *Technical Guidance Document: Quality Assurance and Quality Control for Waste Containment Facilities*, U.S. EPA, EPA/600/R-93/182, 1993.

37. *Risk Assessment Guidance for Superfund - Volume I Human Health Evaluation Manual (Part A)*, U.S. EPA, EPA/540/1-89/002, December 1989.

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Enclosure 3
Site Summary

The South Dayton Dump site is an inactive landfill located at 1976 Dryden Road (aka Springboro Pike) in Moraine, Ohio, just southwest of Dayton (see Figure 1). The landfill is located on a 40-acre parcel of land. Approximately 25 acres of the land is owned by Margaret Grillot and Katheryn Boesch. The remaining 15 acres is owned by Margaret Grillot. An air photo analysis indicates that the actual limits of the landfill extend beyond previously reported boundaries. The landfill also operated under the name Moraine Recycling.

The landfill is located 350 feet east of the Great Miami River in a heavily industrial and commercial area. A trailer park is located across the street from the landfill on the southeast corner of Dryden and East River Roads. The landfill is separated from the river by a tree-lined manmade levee and a flat open area with a bicycle trail. The open area and the bicycle trail are in the 100-year flood plain and are owned by the Miami Conservancy District. The site also contains a federally designated wetland.

The northern part of the landfill property is leased by an asphalt plant and contains half of a large asphalt storage pile. From the 1960s to late 1980s or early 1990s, a former auto salvage yard, light industry and an asphalt plant and asphalt storage pile were north of the landfill. East of the landfill are Dryden Road and light industry. A pallet manufacturing and repair company operates on the southeast section of the landfill. A large gravel pit filled with water borders the landfill to the south-southwest.

A 1954 air photo indicates that the former auto salvage yard north of the landfill and the buildings along Dryden Road east of the former auto salvage yard (believed to be part of the 40-acre parcel of land) are over areas that once contained solid waste, stained areas and possible and probable drums. An air photo from 1981 also indicates probable fly ash in the triangular-shaped area between the south access road and the water-filled gravel pit. This triangular area, along with the northern part of the water-filled gravel pit, is also believed to be part of the 40-acre parcel of land.

The landfill was managed by Alcine Grillot and operated between approximately 1941 and 1996. Waste haulers who took material to the landfill include Emory Joseph Sepeck (aka Joe Sepeck), Sepeck Industrial Waste Service and Industrial Waste Disposal. Drums, metal turnings, fly ash, foundry sand, demolition material, wooden pallets, asphalt, paint, paint thinner and other industrial wastes were disposed at the landfill. The primary disposal practice was open burning followed by landfilling.

EPA conducted a Screening Site Inspection of the landfill in 1991 and a Focused Site Inspection Prioritization Site Evaluation in 1995. Ohio EPA conducted a Site Team Evaluation Prioritization of the landfill in 1996, and in June 2002 EPA conducted an Aerial Photographic Analysis.

Soil borings drilled in 1996 show that the thickness of the landfill ranges from about 4 to 6 feet below ground surface, with one location having as much as 12 feet of fill. The water table ranges from about 12 to 18 feet below ground surface. Groundwater generally flows west-southwest toward the Great Miami River and may also discharge to the gravel pit south of the site.

Soil samples collected in 1991 and 1996 contained 1,2-dichloroethene, trichloroethene, tetrachloroethene, polynuclear aromatic hydrocarbons, pesticides, polychlorinated biphenys and inorganic compounds. Groundwater samples contained chloroethane, acetone, 1,1-dichloroethane, 1,2-dichloroethene, toluene, phenol and heptachlor. Sediment samples collected from the water-filled gravel pit and the Great Miami River contained pesticides, polychlorinated biphenyls and mercury.

In 1998 and 1999 the property owners installed 10 additional groundwater monitoring wells at the site. In 2000, 2001 and 2002 the property owners sampled these wells and the 3 existing wells for volatile organic compounds. Trichloroethene, 1,2-dichloroethene (total) and vinyl chloride were detected in the groundwater samples at concentrations above drinking water standards. The maximum detected concentrations of these chemicals were 76 ug/l for trichloroethene, 480 ug/l for 1,2-dichloroethene and 180 ug/l for vinyl chloride.

FIGURE 1
SOUTH DAYTON DUMP SITE
1976 Dryden Road, Moraine, OH

View from East Looking West
Approximate Boundaries Shown In Bold

Enclosure 4

South Dayton Dump Site

U. S. EPA Small Business Resources

EPA Environmental Protection Agency

EPA 300 F 99-004 September 1999

Office of Enforcement and Compliance Assurance

INFORMATION SHEET

U.S. EPA Small Business Resources

If you own a small business, the United States Environmental Protection Agency (EPA) offers a variety of compliance assistance and tools to assist you in complying with federal and State environmental laws. These resources can help you understand your environmental obligations, improve compliance and find cost-effective ways to comply through the use of pollution prevention and other innovative technologies.

EPA Websites

EPA has several Internet sites that provide useful compliance assistance information and materials for small businesses. Many public libraries provide access to the Internet at minimal or no cost.

EPA's Small Business Home Page (http://www.epa.gov/sbo) is a good place to start because it links with many other related websites. Other useful websites include:

EPA's Home Page
http://www.epa.gov

Small Business Assistance Programs
http://www.epa.gov/ttn/sbap

Compliance Assistance Home Page
http://www.epa.gov/oeca/oc

Office of Site Remediation Enforcement
http://www.epa.gov/oeca/osre

Hotlines, Helplines and Clearinghouses

EPA sponsors approximately 89 free hotlines and clearinghouses that provide convenient assistance on environmental requirements.

EPA's Small Business Ombudsman Hotline can provide a list of all the hot lines and assist in determining the hotline best meeting your needs. Key hotlines include:

EPA's Small Business Ombudsman
(800) 368-5888

Hazardous Waste/Underground Tanks/ Superfund
(800) 424-9346

National Response Center
(to report oil and hazardous substance spills)
(800) 424-8802

Toxics Substances and Asbestos Information
(202) 554-1404

Safe Drinking Water
(800) 426-4791

Stratospheric Ozone and Refrigerants Information
(800) 296-1996

Clean Air Technical Center
(919) 541-0800

Wetlands Hotline
(800) 832-7828

Continued on back

Compliance Assistance Centers

In partnership with industry, universities, and other federal and state agencies, EPA has established national Compliance Assistance Centers that provide Internet and "faxback" assistance services for several industries with many small businesses. The following Compliance Assistance Centers can be accessed by calling the phone numbers below and at their respective websites:

Metal Finishing
(1-800-AT-NMFRC or www.nmfrc.org)

Printing
(1-888-USPNEAC or www.pneac.org)

Automotive Service and Repair
(1-888-GRN-LINK or www.ccar-greenlink.org)

Agriculture
(1-888-663-2155 or www.epa.gov/oeca/ag)

Printed Wiring Board Manufacturing
(1-734-995-4911 or www.pwbrc.org)

The Chemical Industry
(1-800-672-6048 or www.chemalliance.org)

The Transportation Industry
(1-888-459-0656 or www.transource.org)

The Paints and Coatings Center
(1-800-286-6372 or www.paintcenter.org)

State Agencies

Many state agencies have established compliance assistance programs that provide on-site and other types of assistance. Contact your local state environmental agency for more information. For assistance in reaching state agencies, call EPA's Small Business Ombudsman at (800)-368-5888 or visit the Small Business Environmental Homepage at http://www.smallbizenviroweb.org/state.html.

Compliance Incentives

EPA provides incentives for environmental compliance. By participating in compliance assistance programs or voluntarily disclosing and promptly correcting violations, businesses may be eligible for penalty waivers or reductions. EPA has two policies that potentially apply to small businesses: The Audit Policy (http://www.epa.gov/oeca/auditpol.html) and the Small Business Policy (http://www.epa.gov/oeca/smbusi.html). These do not apply if an enforcement action has already been initiated.

Commenting on Federal Enforcement Actions and Compliance Activities

The Small Business Regulatory Enforcement Fairness Act (SBREFA) established an ombudsman ("SBREFA Ombudsman") and 10 Regional Fairness Boards to receive comments from small businesses about federal agency enforcement actions. The SBREFA Ombudsman will annually rate each agency's responsiveness to small businesses. If you believe that you fall within the Small Business Administration's definition of a small business (based on your Standard Industrial Code (SIC) designation, number of employees or annual receipts, defined at 13 C.F.R. 121.201; in most cases, this means a business with 500 or fewer employees), and wish to comment on federal enforcement and compliance activities, call the SBREFA Ombudsman's toll-free number at 1-888-REG-FAIR (1-888-734-3247).

Your Duty to Comply

If you receive compliance assistance or submit comments to the SBREFA Ombudsman or Regional Fairness Boards, you still have the duty to comply with the law, including providing timely responses to EPA information requests, administrative or civil complaints, other enforcement actions or communications. The assistance information and comment processes do not give you any new rights or defenses in any enforcement action. These processes also do not affect EPA's obligation to protect public health or the environment under any of the environmental statutes it enforces, including the right to take emergency remedial or emergency response actions when appropriate. Those decisions will be based on the facts in each situation. The SBREFA Ombudsman and Fairness Boards do not participate in resolving EPA's enforcement actions. Also, remember that to preserve your rights, you need to comply with all rules governing the enforcement process.

EPA is disseminating this information to you without making a determination that your business or organization is a small business as defined by Section 222 of the Small Business Regulatory Enforcement Fairness Act (SBREFA) or related provisions.

Enclosure 5
SOUTH DAYTON DUMP
POTENTIALLY RESPONSIBLE PARTY LIST
LAST UPDATED 8/12/02

1. Dayton Power & Light Company
   Attn: Athan Vinolus
   MacGregor Park
   1065 Woodman Drive
   Dayton, OH 45432

2. Delphi Automotive Systems
   f/k/a Delco-Moraine
   Attn: Cassandra Weaver
   M/C 480-410-166
   5825 Delphi Drive
   Troy, OH 48098

3. Illinois Tool Works, Inc.
   Attn: Ken Brown
   3600 West Lake Avenue
   Glenview, IL 60025-5811
   (re: Hobart Corporation)

   ITW Food Equipment Group
   f/k/a Hobart Corporation
   Attn: Steve Adams
   701 S. Ridge Avenue
   Troy, OH 45374

4. Waste Management, Inc.
   f/k/a Industrial Waste Disposal
   Attn: Debra Kopsky
   720 Butterfield Road
   Lombard, IL 60148

   The Danis Companies
   f/k/a Industrial Waste Disposal
   Attn: Gregory McCann
   2 Riverplace
   Dayton, OH 45405